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REGULATION FOR CONSERVATIVES: BEHAVIORAL ECONOMICS AND THE CASE FOR “ASYMMETRIC PATERNALISM”

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TED O'DONOGHUE, AND MATTHEW RABIN[†]

INTRODUCTION

Regulation by the state can take a variety of forms. Some regulations are aimed entirely at redistribution, such as when we tax the rich and give to the poor. Other regulations seek to counteract externalities by restricting behavior in a way that imposes harm on an individual basis but yields net societal benefits. A good example is taxation to fund public goods such as roads. In such situations, an individual would be better off if she alone were exempt from the tax; she benefits when everyone (including herself) must pay the tax.

In this paper, we are concerned with a third form of regulation: paternalistic regulations that are designed to help on an individual basis. Paternalism treads on consumer sovereignty by forcing, or preventing, choices for the individual's own good, much as when parents limit their child's freedom to skip school or eat candy for dinner. Recent research in behavioral economics has identified a variety of decision-making errors that may expand the scope of paternalistic regula-

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tion.¹ To the extent that the errors identified by behavioral research lead people not to behave in their own best interests, paternalism may prove useful. But, to the extent that paternalism prevents people from behaving in their own best interests, paternalism may prove costly.²

Our purpose in this Article is to argue that in many cases it is possible to have one's cake and eat it too. We propose an approach to evaluating paternalistic regulations and doctrines that we call "asymmetric paternalism." A regulation is asymmetrically paternalistic if it creates large benefits for those who make errors, while imposing little or no harm on those who are fully rational.³ Such regulations are relatively harmless to those who reliably make decisions in their best interest, while at the same time advantageous to those making suboptimal choices.

We then document existing and potential regulatory responses to decision-making errors that satisfy this criterion. Our paper seeks to engage two different audiences with two different sets of concerns: For those (particularly economists) prone to rigid antipaternalism, the paper describes a possibly attractive rationale for paternalism as well as a careful, cautious, and disciplined approach. For those prone to give

¹ See, e.g., Christine Jolls et al., *A Behavioral Approach to Law and Economics*, 50 STAN. L. REV. 1471, 1545 (1998) (concluding that individuals realistically display only bounded rationality, bounded willpower, and bounded self-interest; and calling for a more complex, and accurate, economic analysis of law); Russell B. Korobkin & Thomas S. Ulen, *Law and Behavioral Science: Removing the Rationality Assumption from Law and Economics*, 88 CAL. L. REV. 1051, 1059 (2000) (finding that individuals frequently "fail to maximize their expected utility," and identifying behavioral factors that may complicate the cost-benefit analysis by individuals on which much of rational choice theory depends).

² Many regulations are ambiguous in terms of whether they are better classified as paternalistic or aimed at counteracting externalities. "Helmet laws" for motorcyclists, for example, probably reflect a mixture of paternalistic motivations—concerns that motorcyclists who don't wear helmets fail to truly appreciate the risks they are taking—and externality motivations—chiefly, that society will have to pick up the tab for medical expenses created by accidents involving motorcyclists who don't wear helmets.

³ This idea has been presented under the rubric of "cautious paternalism." See Ted O'Donoghue & Matthew Rabin, *Procrastination in Preparing for Retirement*, in BEHAVIORAL DIMENSIONS OF RETIREMENT ECONOMICS 125, 150 (Henry J. Aaron ed., 1999) (describing how policies based on "cautious paternalism" can be "valuable if people are making errors, but . . . have relatively small costs if people are fully rational") [hereinafter O'Donoghue & Rabin, *Procrastination*]; cf. Ted O'Donoghue & Matthew Rabin, *Risky Behavior Among Youths: Some Issues from Behavioral Economics*, in RISKY BEHAVIOR AMONG YOUTHS: AN ECONOMIC ANALYSIS 29, 31 (Jonathan Gruber ed., 2001) (advocating a principled method to study when and how youths make errors, which interventions mitigate errors, and when interventions help more than they harm).

unabashed support for paternalistic policies based on behavioral economics, this paper argues that more discipline is needed and proposes a possible criterion.

Historically, the core justification for paternalism arose from skepticism about the ability of certain categories of people to make decisions in their best interest.⁴ Beginning in the nineteenth century, this category was comprised of those deemed incapable of contracting for themselves, including, in the words of one leading case, “idiots, minors or married women.”⁵ Paternalism was the appropriate social response for those who were to be treated ultimately as wards of the state.⁶ While our conception of the competence of women has changed markedly, and the “idiot” designation arouses discomfort, this general rationale for paternalism persists.

Our approach accords even better with a second justification for paternalism which focuses on situations rather than persons. A number of regulations reflect the fear that even people of sound mind might not act in their long-term self-interest in certain predictable situations. For example, usury laws and laws against selling oneself into indefinite servitude protect those in desperate economic straits from accepting contracts with potentially devastating long-term consequences.⁷ Health and safety regulation of dangerous occupations was based on fears that pressure to provide for one’s family might lead people to incur risks deemed unacceptable to the larger society.⁸ Regulation of narcotics may stem from concerns that narcotics have the capacity to turn ordinarily functioning people into the equivalent of “minors” or “idiots.”⁹

⁴ Cf. *infra* Part III.B (considering proposals embodying varying degrees of asymmetric paternalism that will assist irrational individuals to make better decisions).

⁵ *Rogers v. Higgins*, 48 Ill. 211, 217 (1868), available at 1868 WL 5084, at *4.

⁶ See Eyal Zamir, *The Efficiency of Paternalism*, 84 VA. L. REV. 229, 230 (1998) (providing examples of paternalistic regulations focusing on those considered to be of limited capacity).

⁷ See Anthony T. Kronman, *Paternalism and the Law of Contracts*, 92 YALE L.J. 763, 778-84 (1983) (arguing that the possibilities of regret and disappointment justify laws against “self-enslavement”); Eric A. Posner, *Contract Law in the Welfare State: A Defense of the Unconscionability Doctrine, Usury Laws, and Related Limitations on the Freedom to Contract*, 24 J. LEGAL STUD. 283, 312-14 (1995) (detailing historical justifications for usury laws).

⁸ See, e.g., *Holden v. Hardy*, 169 U.S. 366, 393-98 (1898) (upholding maximum hours legislation regulating the underground mining industry).

⁹ Cf., e.g., 75 PA. CONS. STAT. § 1503(a) (1996) (prohibiting the issuance of drivers licenses to categories of individuals who are “user[s] of alcohol or any controlled substance” and persons who have been adjudged “to be afflicted with or suffer[] from any mental disability or disease”).

Recent developments in the social sciences have provided new foundations for paternalism. The latest entrant into the paternalism debate comes from the introduction into legal analysis of developments in behavioral economics. By cataloging a list of common decision-making errors that even highly competent, well-functioning people make in predictable situations, this research potentially broadens the scope of situations in which paternalistic policies could usefully be developed.

This Article, and our pursuit of an approach we term "asymmetric paternalism," reflect trepidations shared among all of the authors about the use of behavioral research to justify paternalistic policies. We have two major concerns. First, while research in behavioral economics documents common mistakes, those mistakes are typically far from universal,¹⁰ and we worry that paternalistic policies may impose undue burdens on those people who are behaving rationally in a particular situation. Second, behavioral economics is in an early stage of development, and therefore its findings should elicit more caution than those from more "mature" fields (which are by no means themselves invulnerable to revision). These and related concerns suggest caution in promoting paternalistic policies at this stage and lead to our more conservative notion of asymmetric paternalism.¹¹

I. BOUNDS ON RATIONALITY AND BEHAVIORAL ECONOMICS

The standard approach in economics assumes "full rationality." While disagreement exists as to what exactly full rationality encompasses, most economists would agree on the following basic components:¹² First, people have well-defined preferences (or goals) and

¹⁰ See, e.g., Samuel Issacharoff, *Can There Be a Behavioral Law and Economics?*, 51 VAND. L. REV. 1729, 1734-41 (1998) (noting that substantive deviations from the rational choice model found in the endowment effect, hindsight bias, and self-serving biases require more research before they can be incorporated into an accurate behavioral model).

¹¹ We also echo the common intuition that people may have an intrinsic taste for free choice, and many of the policies we discuss may be worse than described if people believe that they encroach on their freedom. Yet not all of what we propose actually leads to less choice. We feel that how people perceive limits on their free choice should itself be subject to behavioral research, rather than be treated as an axiom of resistance in the exploration of paternalism.

¹² Compare Richard A. Posner, *Rational Choice, Behavioral Economics, and the Law*, 50 STAN. L. REV. 1551, 1551 (1998) (emphasizing the prevalence of "rational" thought in rational choice, as opposed to behavioral, economics), with Jolls et al., *supra* note 1, at 1476-81 (emphasizing the notion that "actual" individuals display "bounded rational-

make decisions to maximize those preferences. Second, those preferences accurately reflect (to the best of the person's knowledge) the true costs and benefits of the available options. Third, in situations that involve uncertainty, people have well-formed beliefs about how uncertainty will resolve itself, and when new information becomes available, they update their beliefs using Bayes's law—the presumed ability to update probabilistic assessments in light of new information.¹³

Behavioral economics challenges all of these assumptions and attempts to replace them with more realistic approaches based on scientific findings from other social sciences.¹⁴ Its development in the past two decades can be traced to two parallel, complementary intellectual lines of research. One line of research consisted of experimental work by cognitive psychologists who began to identify a wide range of decision-making “anomalies”—patterns of judgment and choice that were inconsistent with utility maximization and/or Bayesian updating—and to identify cognitive shortcuts or “heuristics” that could potentially account for the anomalies.¹⁵ The second, parallel effort was conducted by economists who felt the rational choice paradigm should be extended to account for normal bounds on rationality, while maintaining the emphasis on formal rigor and field applications that sets economics apart from some other social sciences.¹⁶ Cognitive psychology provided ideal raw material that could be used to inform new theories of economic choice.

One can distinguish two phases, or “waves,” in the modern (post-1980) history of behavioral economics. The first wave identified a va-

ity,” rather than the universal rationality envisioned by rational choice economics).

¹³ For a general discussion of applications of Bayes's law, see DOUGLAS G. BAIRD ET AL., *GAME THEORY AND THE LAW* 79-121 (1994).

¹⁴ See, e.g., CHOICES, VALUES, AND FRAMES, at x-xvii (Daniel Kahneman & Amos Tversky eds., 2000) (explaining the editors' desire to compile literature that would expand and “get right” the prospect theory of decision making); Colin Camerer & George Loewenstein, *Behavioral Economics: Past, Present and Future*, in *ADVANCES IN BEHAVIORAL ECONOMICS* (Colin Camerer et al. eds., forthcoming 2003).

¹⁵ See, e.g., Amos Tversky & Daniel Kahneman, *Judgment Under Uncertainty: Heuristics and Biases*, in *JUDGMENT UNDER UNCERTAINTY: HEURISTICS AND BIASES* 3, 4 (Daniel Kahneman et al. eds., 1982) (arguing that “representativeness heuristic[s], in which probabilities are evaluated by the degree to which *A* is representative of *B*,” lead to “serious errors, because similarity, or representativeness, is not influenced by several factors that should affect judgments of probability”).

¹⁶ See, e.g., Herbert A. Simon, *A Behavioral Model of Rational Choice*, 69 Q.J. ECON. 99, 103-10 (1955) (using traditional economic analysis to develop “approximate” definitions of rationality that more closely reflect human behavior).

riety of disparate phenomena that were all anomalous compared to rational choice predictions, but which otherwise had little in common.¹⁷ As a result, early critics of behavioral economics often complained that it was just a laundry list of departures from rational choice. The second wave is now gathering force and it represents a scientific consolidation that addresses this critique.¹⁸ Precise functions that add one or two free parameters to standard rational theories are being applied to explain important anomalies and make fresh predictions.

Some research in behavioral economics has focused on how people's preferences are not what economists had supposed. For instance, in evaluating risky gambles over uncertain outcomes, people seem disproportionately averse to losses, and also dislike choosing in the face of "ambiguity" (knowing that they are missing information that would, if available, affect their decision).¹⁹ As another example, people seem to have social preferences that cause them to care about more than merely maximizing their own material payoffs.²⁰ These de-

¹⁷ See, e.g., Daniel McFadden, *Rationality for Economists?*, 19 J. RISK & UNCERTAINTY 73, 73 (1999) (examining anomalies of behavior from the standard economic model of perception, preference, and process rationality, and arguing that studies of how perceptions are formed and how they influence decision making, may help build a new economic analysis).

¹⁸ See Camerer & Loewenstein, *supra* note 14 (surveying and providing examples of recent developments in behavioral economics).

¹⁹ See Colin F. Camerer, *Prospect Theory in the Wild: Evidence from the Field*, in CHOICES, VALUES, AND FRAMES, *supra* note 14, at 289 tbl.16.1 (giving ten examples of patterns—in consumer choice, financial and housing markets, betting, insurance, and labor supply—which are parsimoniously explained by elements of prospect theory and isolation of a single choice or moment from other decisions); Colin Camerer & Martin Weber, *Recent Developments in Modeling Preferences: Uncertainty and Ambiguity*, 5 J. RISK & UNCERTAINTY 325, 360 (reviewing experimental evidence, theories, and applications of research on the aversion to ambiguity in decision making); Daniel Kahneman & Amos Tversky, *Prospect Theory: An Analysis of Decision Under Risk*, 47 ECONOMETRICA 263 (1979) (showing that disproportionate aversion to losses and over- and under-weighting of probabilities influence choices of risky outcomes); Amos Tversky & Daniel Kahneman, *Loss Aversion in Riskless Choice: A Reference-Dependent Model*, 106 Q.J. ECON. 1039, 1054-58 (1991) (exploring the theory that losses have greater impact on preferences than gains, and that this may help explain such phenomena as brand loyalty and negotiating strategies).

²⁰ See, e.g., Gary E. Bolton & Axel Ockenfels, *ERC: A Theory of Equity, Reciprocity, and Competition*, 90 AM. ECON. REV. 166, 166 (2000) (demonstrating a simple economic model that generates consistent results premised on the fact that the relative payoff—how a person's payoff compares to others'—motivates people); Gary Charness & Matthew Rabin, *Understanding Social Preferences with Simple Tests*, 117 Q.J. ECON. 817, 849-51 (2002) (finding that individuals are more concerned with increasing social welfare than with reducing differences in payoffs and that individuals are motivated by reciprocity); Ernest Fehr & Klaus M. Schmidt, *A Theory of Fairness, Competition, and Coopera-*

velopments challenge the descriptive validity of standard economic models, but they do not raise questions about the rationality of economic behavior. To the extent that such tendencies accurately reflect true preferences, they do not create a need for paternalism.²¹

But a large part of behavioral economics describes ways people sometimes fail to behave in their own best interests. For instance, a substantial body of literature examines how people with self-control problems may fail to carry out their desired course of action.²² Another has documented the ways in which people fail to process information as Bayes's rule would require.²³ And a variety of researchers

tion, 114 Q.J. ECON. 817, 855-56 (1999) (exploring economic models of self-centered inequity aversion—when people are willing to give up material payoff for an equitable outcome—and gaining insight into how an economic environment determines whether fair types or selfish types dominate); George F. Loewenstein et al., *Social Utility and Decision Making in Interpersonal Contexts*, 57 J. PERSONALITY & SOC. PSYCHOL. 426, 438-39 (1989) (studying social utility in a dispute context in order to estimate social utility functions that could be used to predict individual behavior in situations where decisions had consequences not only for the self but also for another party); Matthew Rabin, *Incorporating Fairness into Game Theory and Economics*, 83 AM. ECON. REV. 1281, 1281-82 (1993) (developing a game-theoretic solution concept of “fairness equilibrium,” in which people like to help those helping them and hurt those who are hurting them).

²¹ Such tendencies do, of course, have policy implications—for example, a better understanding of risk preferences could help us design more efficient insurance policies. And as discussed below, *infra* notes 22-24 and accompanying text, there is significant evidence that not all “risk preferences” that manifest themselves in choice behavior seem to be fully rational in the sense of maximizing *experienced* welfare. As such, there may be room for paternalism even in this domain.

²² See David Laibson, *Golden Eggs and Hyperbolic Discounting*, 112 Q.J. ECON. 443, 444-45 (1997) (claiming that consumers invest in illiquid assets, which promise to generate substantial future benefits as a commitment device to augment personal self-control in the face of inconsistent preferences); George Loewenstein, *Out of Control: Visceral Influences on Behavior*, 65 ORG'L BEHAV. & HUM. DECISION PROCESSES 272, 272-73 (1996) (arguing that the disjunction between behavior and perceived self-interest results from visceral factors which, at high levels of intensity, can become “so powerful as to virtually preclude decisionmaking”); Ted O'Donoghue & Matthew Rabin, *Doing It Now or Later*, 89 AM. ECON. REV. 103, 118-20 (1999) (analyzing the circumstances in which self-control problems lead people not to carry out their desired course of action).

²³ See Tversky & Kahneman, *supra* note 15, at 5 (attributing the violation to Bayes's rule by evaluating probabilities based on stereotypes and not prior probabilities). A number of sources have laid out formal models of biases in judgment that reflect distinctions from Bayesian reasoning. See, e.g., Matthew Rabin, *Inference by Believers in the Law of Small Numbers*, 117 Q.J. ECON. 775, 776, 785-87 (2002) (identifying systematic departure from Bayesian reasoning because of biases “such as belief in law of small numbers, the gambler's fallacy and overinference”); Matthew Rabin & Joel Schrag, *First Impressions Matter: A Model of Confirmatory Bias*, 114 Q.J. ECON. 37, 38-39 (1999) (defining confirmatory bias as when an actor interprets ambiguous evidence to confirm her current hypothesis about the world while a proper Bayesian observer would favor a dif-

have shown that people exhibit systematic mispredictions about the costs and benefits of choices—for example, the degree of loss aversion exhibited in people's choices seems inconsistent with their actual experiences of gains and losses.²⁴ It is such errors—apparent violations of rationality—that can justify the need for paternalistic policies to help people make better decisions and come closer to behaving in their own best interest.

Behavioral economics extends economic theory in a manner similar to other successful extensions. The simplest models in economics assume perfect competition, perfect information, and perfect rationality. These boundary cases are obviously unrealistic much of the time, but can yield plain insight and useful approximations. Furthermore, gradually relaxing each of these strict assumptions has proved productive. Starting in the 1930s, economists began to relax the assumption of perfect *competition* by firms and agents, which helped to spawn a wave of innovative research in industrial organization.²⁵ Beginning in the 1970s, the assumption of perfect *information* was relaxed (in models of costly search, screening, signaling, and so forth) with enormous success.²⁶ Relaxing the assumptions of perfect *rationality* represents a logical next step in this productive progression.

The scientific consolidation of psychological findings into a new brand of behavioral economic theory breathes new life into the rationales for paternalistic regulation discussed above. In a sense, behavioral economics extends the paternalistically protected category of “idiots” to include most people, at predictable times. The challenge is figuring out what sorts of “idiotic” behaviors are likely to arise routinely and how to prevent them, while imposing minimal restrictions on those who behave rationally.

ferent hypothesis).

²⁴ See Tversky & Kahneman, *supra* note 19, at 1047-48 (finding that the introduction of a disadvantage tends to decrease the valuation a person places on something more than the introduction of an advantage tends to increase its value); see also Michael Strahilevitz & George Loewenstein, *The Effect of Ownership History on the Valuation of Objects*, 25 J. CONSUMER RES. 276, 285 (1998) (finding a duration-of-current-ownership effect, “according to which selling prices increase as a function of how long an object has been owned”).

²⁵ See generally George Loewenstein, *The Fall and Rise of Psychological Explanations in the Economics of Intertemporal Choice*, in CHOICE OVER TIME 3 (George Loewenstein & Jon Falster eds., 1992) (chronicling the evolution of economic thought).

²⁶ See, e.g., THOMAS C. SCHELLING, CHOICE AND CONSEQUENCE 195-242 (1984) (applying strategic analysis and game theory to interactive problems in situations of incomplete information).

II. ASYMMETRIC PATERNALISM

To understand *asymmetric* paternalism, consider first how one might evaluate paternalistic policies more generally. To fix ideas, suppose (1) we can divide consumers into two types: those who are boundedly rational (in the sense described above) and those who are fully rational; and that (2) a fraction, p , of consumers fall into the boundedly rational category. Suppose further that a proposed paternalistic policy is designed to counteract mistakes made by boundedly rational consumers but, by restricting behavior, might impose costs on fully rational consumers. Let B denote the net benefits to boundedly rational agents, and let C denote the net costs to rational agents. The policy might also involve implementation costs, which we denote by I .²⁷ Finally, the policy might alter firms' profits, which we denote by $\Delta\Pi$. The proposed policy is, on net, beneficial if:

$$(p * B) - [(1 - p) * C] - I + \Delta\Pi > 0 \quad (1)$$

Our focus is not on paternalistic policies generally but rather on a specific type of paternalistic policy: a policy is *asymmetrically paternalistic* if it creates large benefits for those people who are boundedly rational (B is large) while imposing little or no harm on those who are fully rational (C is small). Such policies are appealing because, even possessing little information about the frequency of consumer errors, as long as we think p is positive—as long as we can get even the truest believer in consumer rationality to concede that some agents, some of the time, exhibit bounded rationality—we can conclude with some confidence that the policy is on net beneficial. Taken to its extreme, pure asymmetric paternalism—situations in which $B > 0$ and $C = 0$ —can only help consumers.

Of course, two caveats are in order, reflecting the third and fourth terms in equation (1). First, we certainly need to be wary of implementation costs. Indeed, an integral part of asymmetric paternalism is not only that policies impose small costs on fully rational consumers, but also that they involve low implementation costs. As in all policy-making, judgment and consensus will be required, but we suspect that it will often be possible to find examples in which the benefits are sufficiently large relative to both the costs imposed on fully rational types

²⁷ If bureaucrats design or implement the policy badly, due to their own rationality bounds or regulatory capture, then I will be large.

and the implementation costs so that most people can agree that the policy is worthwhile.²⁸

Second, we acknowledge that, to the extent that we are correct about consumers making errors, firms may benefit from exploiting these errors (either intentionally or unintentionally), and hence may suffer under asymmetrically paternalistic policies. However, we claim that any asymmetrically paternalistic policy that helps boundedly rational consumers make better choices must, on net, increase economic efficiency as measured by the sum of consumer and producer surplus.²⁹ To explain, an analogy to consumption externalities is useful.

Figure 1

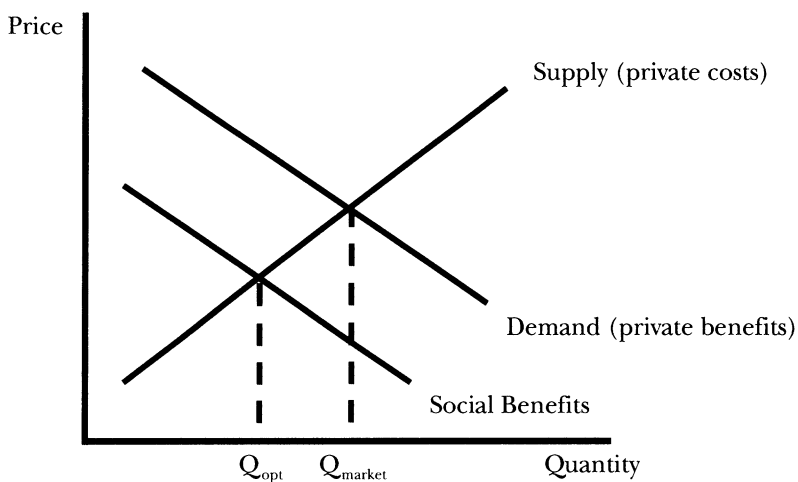


Figure 1 depicts the classic case of a negative consumption externality—as when one’s consumption of loud music creates disutility for

²⁸ And occasionally, paternalistic policies could have “negative implementation costs.” For example, a policy might advocate that courts refuse to help enforce or entertain law suits regarding contracts that are deemed unwise; or a policy that provides for laws against hasty marriages could diminish the number of full-fledged divorce and child custody legal cases the states will eventually face.

²⁹ Of course, asymmetrically paternalistic policies are not likely to yield Pareto improvements, wherein everyone benefits. In particular, to the extent that the owners of firms are not a random sample of consumers, asymmetrically paternalistic policies will tend to transfer surplus from the owners of firms to consumers.

one's neighbors. In this situation, the supply curve reflects the private and social costs of production (which coincide). But where the demand curve reflects the private benefits of consumption, negative consumption externalities imply that the social benefits of consumption are smaller than the private benefits. As a result, the market produces a larger quantity than is socially desirable and, while reducing production might hurt firms, it increases social surplus.

When consumers make errors, it is as if they are imposing externalities on themselves because the decisions they make (as reflected by their demand) do not accurately reflect the benefits they derive.³⁰ The goal of asymmetric paternalism is to help boundedly rational consumers make better decisions and align their demand more closely with the true benefits they derive from consumption. To the extent that such policies succeed, they will result in superior social outcomes even if individual firms are hurt. However, it is not necessarily the case that firms will be hurt; if consumer errors are in the direction of buying too little, asymmetric paternalism may have the beneficial side effect of increasing firms' profits.

A. *The Goal of Asymmetric Paternalism*

The concept of asymmetric paternalism is useful for three different purposes. The first is to clarify the terms of an emerging debate among legal scholars. On one side are conservative scholars, such as Richard Posner, who assume that individuals are generally rational³¹—and hence need not, and should not, be regulated—and that even well-meant regulations might backfire because of both regulatory capture and the bounded rationality of bureaucrats.³² On the other side are scholars influenced by behavioral economics, such as Jolls, Sunstein, and Thaler, whose recent article advocates an approach dubbed

³⁰ Herrnstein, Loewenstein, Prelec, and Vaughan refer to externalities imposed on the self as "internalities." R. Herrnstein et al., *Utility Maximization and Melioration: Internalities in Individual Choice*, 6 J. BEHAV. DECISION MAKING 149, 150 (1993) (defining an "internality" as a within-person externality, "which occurs when a person underweighs or ignores a consequence of his or her own behavior for him or herself").

³¹ See RICHARD A. POSNER, *ECONOMIC ANALYSIS OF LAW* 15-17 (3d ed. 1986) (defending the assumption of rationality in economic models of law).

³² See Gary S. Becker, *A Theory of Competition Among Pressure Groups for Political Influence*, 98 Q.J. ECON. 371, 372 (1983) (setting out the role of capture in directing public policy by analyzing how competition among pressure groups seeking political influence affects taxes, subsidies, and other political favors and reduces aggregate efficiency).

“anti-antipaternalism—a skepticism about antipaternalism, but not an affirmative defense of paternalism.”³³ Asymmetric paternalism goes a step further by providing an affirmative defense of paternalistic policies, albeit only those that are asymmetrically paternalistic.³⁴ These policies impose minimal costs if the conservatives are right, and maximal benefits if rationality and will-power are as bounded as many behavioral economists believe. Asymmetric paternalism might equally well be designated by the term we use in our title: “paternalism for conservatives.”

A crucial assumption in our approach is that the bounds on rationality—their range and implications, as well as which policies help—are empirical questions subject to systematic analysis, and thus cost-benefit judgments can be made. As Jolls, Sunstein, and Thaler wrote, “[n]o axiom demonstrates that people make choices that serve their best interests; this is a question to be answered based on evidence.”³⁵ Of course, to the extent that faith-based antipaternalism practiced by some legal scholars rests on such an axiom, scientific debate will be unproductive. But we are optimistic that a common empirical ground could emerge. The ambitious analogy we have in mind is the influence of medicine and nutrition on policy. Health and food regulations are heavily informed by scientific understanding (albeit an understanding sometimes captured by special interests) and by a widespread belief among professionals that average folks require information, prodding, and often regulation to improve their health and diet.³⁶ Thus are born paternalistic policies such as food content labels, warnings on cigarette packs, active anti-tobacco advertising, and FDA grading. We envision a vaguely similar system in which substituting

³³ Jolls et al., *supra* note 1, at 1541.

³⁴ Thus we mildly part company with Professor Zamir, who looks to behavioral insights in part to determine when paternalistic rules are efficient. *Cf.* Zamir, *supra* note 6, at 267-71 (presenting a model in which “cognitive illusions” affect the efficiency of individual responses to paternalistic policies). We agree with Professor Zamir that bounded rationality implicates paternalistic concerns broader than those of limited intelligence. *See id.* at 285 (“Given the abundant empirical data on the bounded rationality of adults of ordinary intelligence, efficient paternalism should not be restricted to special groups such as minors or the mentally disabled.”).

³⁵ Jolls et al., *supra* note 1, at 1545.

³⁶ *See, e.g.*, Greg Winter, *F.D.A. Action Could Change Food Marketing on the Web*, N.Y. TIMES, Feb. 14, 2001, at C11 (“Under the 1990 law that dictates food labeling, the F.D.A. cannot approve health claims for a type of food until there is ‘significant scientific agreement’ that it helps with an illness.”); *cf.* William K. Stevens, *Asbestos Debate Re-emerges in Dispute over Building Hazard*, N.Y. TIMES, June 26, 1990, at C4 (discussing the scientific debate on the dangers of asbestos and what health regulations would best protect everyone).

the phrase “economic judgment” for the phrase “health and diet” in the preceding analogy leads to a similar mix of information, persuasion, and regulation.

The second purpose of introducing the concept of asymmetric paternalism is “positive” or “descriptive” rather than “normative” or “prescriptive.” Many economic analyses of law are explicitly positive or descriptive: these analyses try to explain how laws evolved to meet efficiency needs. The evolutionary quality of legal rules allows for legal regulation to gravitate toward socially useful forms even when their logic remains poorly articulated. If asymmetrical paternalism is socially useful, therefore, we might expect that instances of it would, in fact, have already evolved. Indeed, below we show that many existing regulations can, in fact, be interpreted as asymmetrically paternalistic.³⁷ It is hard to understand how such laws could promote efficiency in a world in which all agents are rational. An appealing way to explain how these laws came about is that the law reflects what we are calling asymmetric paternalism and uses it as a cost-benefit standard. In this sense, asymmetric paternalism complements the basic law and economics belief that the law tends to move toward efficient solutions. An attentiveness to minimizing costs to rational actors while maximizing benefits to boundedly rational actors fits well within a richer conception of efficiency.

The third and final purpose for asymmetric paternalism is that it helps frame research conducted by social scientists interested in the law. Asymmetric paternalism, specifically as expressed in equation (1) above, provides a general framework for evaluating the efficiency and robustness of paternalistic policies. Consider, for example, a policy that requires patients to get a second opinion before undergoing a particular form of surgery. If a second opinion is always desirable, there will be some benefit to limitedly rational consumers, who get a second opinion when they otherwise would not, but little cost to rational consumers, who spontaneously seek out a second opinion (although there may be implementation costs as well as costs and benefits for insurance companies, surgeons, and hospitals). If a second opinion is not always desirable, there is a reduction in the benefits for the limitedly rational types and an increase in the costs for rational types. The example shows how the concept of asymmetric paternalism could be used to help specify the variables of key interest in evaluating paternalistic policies.

³⁷ See *infra* Part III.B (setting forth examples).

III. REGULATORY EXAMPLES

We now illustrate the concept of asymmetric paternalism by documenting existing and potential regulatory responses to errors in decision making that satisfy the criterion. We focus on four types of policies: (1) default rules; (2) provision or re-framing of information; (3) cooling-off periods; and (4) limiting consumer choices. This list is ranked roughly in increasing order of departure from pure asymmetric paternalism—i.e., the increasing “heavy-handedness” of the policy.

A. Defaults

A robust finding in the behavioral-decision research literature has been labeled the “status quo bias.”³⁸ People are much more likely to stick with existing policies, consumption bundles, legislators, and so on than normative theories would predict, even when the costs of switching are very low. As is often true of robust phenomena, the status quo bias is almost surely due to more than one cause. One source is *loss aversion*—the tendency to place a greater negative value on losses than the positive value one places on equivalent gains.³⁹ If people code the effects of a change in policy as gains and losses and the effects of change are uncertain, loss aversion produces the same aversion to change that underlies the aversion to mixed gambles, those gambles in which there is both some chance of gain and some chance of loss. A second source of status quo bias is what Ilana Ritoy and Jonathan Baron call the “omission/commission bias”—the tendency to care much more about errors of commission than about errors of omission, even when there is no obvious normative reason to draw a distinction.⁴⁰ The omission/commission bias may, in turn, be

³⁸ See William Samuelson & Richard Zeckhauser, *Status Quo Bias in Decision Making*, 1 J. RISK & UNCERTAINTY 1, 7 (1988) (finding that “decision makers exhibit a significant status quo bias”); cf. Richard Thaler, *Toward a Positive Theory of Consumer Choice*, 1 J. ECON. BEHAV. & ORG. 39, 52 (1980) (discussing situations where consumers voluntarily restrict their choices, deliberately not choosing so as to avoid psychic costs that the choices might induce).

³⁹ Loss aversion is most starkly apparent in people’s strong aversion to bets that offer a 50-50 chance of winning or losing a fixed amount (say \$100). In fact, most people are about indifferent between a gamble that offers a 50-50 chance of losing x (say \$100) or winning $2x$ (\$200) when, statistically, they should jump at the chance. In light of the numbers of people who gamble at actuarially unfair odds, or who invest their savings at far less advantageous expected rates of return, the risk aversion incumbent in such preferences is difficult to justify as normatively defensible.

⁴⁰ See Ilana Ritoy & Jonathan Baron, *Reluctance to Vaccinate: Omission Bias and Am-*

fueled in part by an asymmetry in experienced regret—i.e., people's tendency to regret outcomes brought about by their own actions more than outcomes that occur as a result of inaction.⁴¹ Yet a third possible source is procrastination—the tendency to repeatedly delay taking beneficial actions based on a mistaken belief that one will take them in the future.⁴²

The existence of status quo bias creates the possibility of perhaps the closest thing to pure asymmetric paternalism—policies that affect “default” outcomes. For many consumer decisions, it is necessary to specify the outcome in the event that the consumer does nothing. For instance, if a local telephone company changes its service menu, and asks customers to choose one of the new options, some option must be specified as the default option in the event that a consumer does not respond. As long as actively making a choice requires very little effort, the choice of defaults has essentially no effect on fully rational consumers. But for boundedly rational people who have a status quo bias, the choice of defaults is important.

To illustrate, consider a situation in which there are two options, *A* and *B*, and it is costless to change between the two options. Suppose first that the “true” value of option *A* is x , and the value of option *B* is $2x$. If everyone were rational, and there were no status quo bias, then everyone would choose option *B* *regardless of the defaults they may have been assigned*. If instead some people have a status quo bias that is sufficiently strong that they would never switch from their default, aggre-

biguity, in BEHAVIORAL LAW & ECONOMICS 168, 168-72 (Cass Sunstein ed., 2000) (analyzing possible reasons and theories for omission and commission biases).

⁴¹ See Thomas Gilovich & Victoria Husted Medvec, *The Experience of Regret: What, When, and Why*, 102 PSYCHOL. REV. 379, 391-92 (1995) (analyzing temporal patterns of regret and concluding that action produces greater regret in the short term while inaction produces more regret in the long term); Thomas Gilovich et al., *Commission, Omission, and Dissonance Reduction: Coping with Regret in the “Monty Hall” Problem*, 21 PERSONALITY & SOC. PSYCHOL. BULL. 182, 188 (1995) (finding that subjects are more regretful of actions taken than of actions forgone and thus are more likely to initiate remedial actions to compensate for the increased hurt in the short term); see also Kenneth Savitsky et al., *Remembering and Regretting: The Zeigarnik Effect and the Cognitive Availability of Regrettable Actions and Inactions*, 23 PERSONALITY & SOC. PSYCHOL. BULL. 248, 254 (1997) (proving that the Zeigarnik effect, defined as the tendency for people to remember incomplete tasks better than completed tasks because of a feeling of unresolved tension, may contribute to the temporal pattern of regret—that people tend to regret actions more in the short term but inaction more in the long term).

⁴² O'Donoghue & Rabin, *supra* note 22, at 103-24; see also Ted O'Donoghue & Matthew Rabin, *Choice and Procrastination*, 116 Q.J. ECON. 121, 122 (2001) (discussing how procrastination may be more severe when pursuing important, rather than unimportant, goals).

gate utility will be higher if the default is option *B*. Of course, in most real-world situations the “optimal” option is likely to differ across individuals, necessitating a more nuanced approach. One consideration toward this end is determining the likely best option for most people—what is generally referred to as a majoritarian default. The general argument here is that by selecting a default—the option that is best for the larger fraction of people—the cost of making decisions is eliminated for many people as non-decisions would leave most individuals in an advantageous position.

Unfortunately, this reflexive use of majoritarian defaults does not end the inquiry necessary in setting a default. Another consideration is the relative cost of different types of errors. For example, if there were higher costs associated with choosing option *B*, when option *A* is better, than the costs of choosing option *A*, when option *B* is better, a rationale would exist for making option *A* the default. Yet another consideration is whether there is any asymmetry in the status quo bias. For example, if the status quo bias is stronger for people starting with option *B*, that would provide another rationale for making option *A* the default. Much of the legal debate on contract default rules can be cast as a response to the consideration of the likelihood of error and the cost of inefficient contract outcomes.⁴³

1. Insurance Rights

An interesting natural experiment illustrating the power of defaults took place in the neighboring states of New Jersey and Pennsylvania. Both states passed tort-reform legislation which forced companies to offer insurance with limited rights to sue after an accident. However, in New Jersey a limited right to sue was the default, and cus-

⁴³ See, e.g., Ian Ayres & Robert Gertner, *Filling Gaps in Incomplete Contracts: An Economic Theory of Default Rules*, 99 YALE L.J. 87, 91-95 (1989) (providing theories of how courts and legislatures should set default rules); Richard A. Epstein, *Beyond Foreseeability: Consequential Damages in the Law of Contracts*, 18 J. LEGAL STUD. 105, 138 (1989) (arguing that current judicial attitudes, emphasizing expectation damages, should be set aside in favor of views based on tacit risk assumption and greater acceptance of freedom of contract due to greater precision and to advance the long-term welfare of contracting parties); Charles J. Goetz & Robert E. Scott, *The Mitigation Principle: Toward a General Theory of Contractual Obligation*, 69 VA. L. REV. 967, 970 (1983) (stating that common law contract rules for mitigation are deficient due to their imprecision and the uncertain judicial treatment of contract provisions); Jason Scott Johnston, *Strategic Bargaining and the Economic Theory of Contract Default Rules*, 100 YALE L.J. 615, 648 (1990) (explaining that in crafting contract default rules, the preference for expansive default rules may be more efficient, and that established theories fail to adequately account for strategic incentives in bargaining).

tomers had to pay extra to acquire a full right to sue, whereas in Pennsylvania the default was a full right to sue, and customers received a discount if they switched to a limited right to sue. When offered the choice, only about 20% of New Jersey drivers chose to acquire a full right to sue, while approximately 75% of Pennsylvanians retained a full right.⁴⁴ The difference in amount spent on insurance in the two states was approximately \$200 million.⁴⁵ This example reveals little about what the default ought to be but clearly illustrates the powerful effects defaults can have, suggesting the need to choose defaults carefully.

2. Retirement Saving

A more ubiquitous example of status quo bias, and of seemingly beneficial policy changes, comes from studies of retirement savings accounts. When a company offers a 401(k) or similar retirement plan, employees must decide whether to participate. Until recently, the default option was non-participation. Employees had to actively choose to participate. In recent years, some companies have changed the default option to participation. Employees are automatically enrolled unless they actively choose not to participate. Recent research by Choi, Laibson, Madrian, and Metrick, and Madrian and Shea demonstrates that such changes can have large effects on behavior—and in particular that 401(k) participation is significantly higher under automatic enrollment.⁴⁶

Hence, a seemingly innocuous policy change has large economic effects that would seem to be highly beneficial. There is a widespread perception among policymakers that people are undersaving, both from a societal perspective—as reflected in the macroeconomic con-

⁴⁴ Eric J. Johnson et al., *Framing, Probability Distortions, and Insurance Decisions*, 7 J. RISK & UNCERTAINTY 35, 48 (1993).

⁴⁵ *Id.* An alternative explanation for this phenomenon is that consumers regarded the regulators' choice of default as expressing information about what was best. This explanation requires an ancillary assumption that either people believe their own state's regulators more than the other state's regulators or that it is costly to obtain information about the other state's regulations.

⁴⁶ See JAMES J. CHOI ET AL., FOR BETTER OR FOR WORSE: DEFAULT EFFECTS AND 401(K) SAVINGS BEHAVIOR 2 (Pension Research Council, Working Paper No. 2002-2, 2002) (finding that "automatic enrollment has a dramatic effect on retirement savings behavior"); Brigitte C. Madrian & Dennis F. Shea, *The Power of Suggestion: Inertia in 401(k) Participation and Savings Behavior*, 116 Q.J. ECON. 1149, 1184 (2001) (discussing the impact of automatic enrollment in 401(k) savings plans and concluding that participation is higher among plans with automatic enrollment).

cern that the U.S. aggregate saving rate is too low—and from an individual perspective—as reflected in people's self-reports that they save less than they would like.⁴⁷ Moreover, given the favorable tax treatment of 401(k) accounts, and given that employers often provide partial matching funds, 401(k) plans are an especially effective means of saving.

Choi and his colleagues and Madrian and Shea, however, identify an important problem that arises with automatic enrollment. An integral part of any automatic enrollment scheme is that the plan must also include a default contribution rate and a default asset allocation. For the firms studied, the defaults chosen were a relatively low contribution rate (2% or 3%)⁴⁸ and a relatively conservative asset allocation (often 100% to a money-market fund).⁴⁹ Both defaults are disadvantageous—the former because it limits usage of the 401(k) plan, and the latter because stocks have historically outperformed bonds for any typical time horizon for retirement.⁵⁰ Consistent with the status quo bias, a substantial fraction of 401(k) participants hired under automatic enrollment retain both the default contribution rate and the default fund allocation well after enrollment, even though few employees hired before automatic enrollment picked this particular combination.⁵¹ Indeed, Choi, Laibson, Madrian, and Metrick conclude for their sample that the increased wealth accumulation due to increased enrollment rates was roughly offset (on average) by the decreased wealth accumulation resulting from lower contribution rates and more conservative asset allocations.⁵²

⁴⁷ See STEVE FARKAS & JEAN JOHNSON, MILES TO GO: A STATUS REPORT ON AMERICANS' PLANS FOR RETIREMENT 9 (1997) (finding three-quarters of those surveyed believed they should be saving more for retirement); B. Douglas Bernheim, *Do Households Appreciate Their Financial Vulnerabilities? An Analysis of Actions, Perceptions, and Public Policy*, in AM. COUNCIL FOR CAPITAL FORMATION, TAX POLICY FOR ECONOMIC GROWTH IN THE 1990S, 1, 1-30 (1994).

⁴⁸ CHOI ET AL., *supra* note 46, at 13; Madrian & Shea, *supra* note 46, at 1153.

⁴⁹ Madrian & Shea, *supra* note 46, at 1171.

⁵⁰ See Thomas E. MaCurdy & John B. Shoven, *Stocks, Bonds, and Pension Wealth*, in TOPICS IN THE ECONOMICS OF AGING 61, 66 (David A. Wise ed., 1992) (considering whether, given historical returns, a hypothetical faculty member with a twenty-five-year investment horizon would be better off with an all-stock or an all-bond portfolio, and concluding that an all-stock portfolio was almost always better); see also Shlomo Benartzi & Richard H. Thaler, *Myopic Loss Aversion and the Equity Premium Puzzle*, 110 Q.J. ECON. 73, 73 (1995) (reporting "[t]he empirical fact that stocks have outperformed bonds over the last century by a surprisingly large margin").

⁵¹ CHOI ET AL., *supra* note 46, at 13.

⁵² See *id.* at 22 ("[A]utomatic enrollment failed to dramatically raise wealth accumulation because of the conservative nature of the automatic enrollment defaults.").

As these results indicate, the choice of defaults requires careful attention, and minor details can have significant effects. Further evidence suggests that even the set of options available may influence allocations. Benartzi and Thaler show that people tend to allocate their savings evenly across all available options. For example, if a 401(k) plan provides a menu of N options, people tend to allocate proportion $1/N$ of their savings to each option.⁵³ As a result, the net allocation between stocks and bonds depends almost completely on the fund manager's often arbitrary choice of which funds to offer.

It is also worth noting that policymakers may be able to use the status quo bias in their favor. Thaler and Benartzi observe that many 401(k) participants would like to increase their contribution rates, but would prefer to do so in the future rather than now.⁵⁴ Thaler and Benartzi proposed the "Save More Tomorrow Program," which takes advantage of this fact. Specifically, their approach offers workers a plan in which their contributions increase by small increments each year—small enough to ensure that they still receive at least a nominal wage increase each year.⁵⁵ A subsequent study found that even requiring employees to choose among a menu of retirement options with *no* default, but with choice among a menu of options, led to a net increase in savings.⁵⁶ A milder form of paternalism could hardly be imagined. The authors also found dramatic increases in contribution rates among such workers.⁵⁷

Although the policy changes discussed above were implemented by the private sector, current public policy discussions of retirement savings might incorporate these ideas.⁵⁸ Moreover, private policy changes discussed above, in fact, originated from the public sector, because the companies were reacting to new legislation that limited the fraction of income that higher income employees could put aside

⁵³ Shlomo Benartzi & Richard H. Thaler, *Naive Diversification Strategies in Defined Contribution Saving Plans*, 91 AM. ECON. REV. 79, 79 (2001).

⁵⁴ Richard H. Thaler & Shlomo Benartzi, *Save More Tomorrow: Using Behavioral Economics to Increase Employee Saving* 4 (Aug. 2001) (unpublished manuscript, on file with authors).

⁵⁵ *Id.*

⁵⁶ James J. Choi et al., *Benign Paternalism and Active Design: A Natural Experiment in Savings* 2 (Aug. 29, 2002) (unpublished manuscript, on file with authors).

⁵⁷ *Id.* at 11 (finding that "the vast majority of the participants (80%) have remained in the plan through three pay raises," dramatically increasing contribution rates).

⁵⁸ See the Conclusion below for further discussion of whether we should expect the market to provide asymmetrically paternalistic policies.

as a function of the contribution average throughout the firm; these regulations were intended to provide an incentive for companies to enroll large numbers of employees.⁵⁹

B. *Framing and Information Disclosure*

A general conclusion from behavioral economics is that people often do not understand and interpret situations as economists normally assume. This might take the form of ignoring features of the situation that economists deem to be relevant (such as base rates when making probability judgments), or conversely, it might involve people being affected by features that economists assume to be irrelevant (such as superficial differences in how options are described). An implication of such effects is that re-framing a situation in subtle ways that would be irrelevant from the perspective of the standard economic model can have large effects on behavior.⁶⁰ The power of such framing effects, much like the power of defaults, gives rise to another form of nearly pure asymmetric paternalism: policy changes that require firms to re-frame their contracts, or provide seemingly irrelevant additional information. Such requirements might help irrational people make better decisions, while having absolutely no effect on fully rational people. Indeed, for many of the examples we discuss below, the main cost for such policies is that of implementation.

We begin with some potential (but not yet existing) regulatory responses. From an economic perspective, one situation in which people make decisions that seem less than rational is state lotteries. While many people play such lotteries with a realistic sense of their chance of winning, there is evidence that others are not so well informed.⁶¹ There is substantial research showing that people tend to overweigh small probabilities of large salient outcomes, which proba-

⁵⁹ See I.R.C. § 401(k)(3)(A)(ii) (2002) ("A cash or deferred arrangement shall not be treated as a qualified cash or deferred arrangement unless . . . the actual deferral percentage for eligible highly compensated employees . . . bears a relationship to the actual deferral percentage for *all other eligible employees*." (emphasis added)).

⁶⁰ See Amos Tversky & Daniel Kahneman, *Rational Choice and the Framing of Decisions*, in *RATIONAL CHOICE: THE CONTRAST BETWEEN ECONOMICS AND PSYCHOLOGY* 67, 68 (Robin M. Hogarth & Melvin W. Reder eds., 1986) (arguing that "the logic of choice does not provide an adequate foundation for a descriptive theory of decision making").

⁶¹ See Tversky & Kahneman, *supra* note 15, at 7-8 (detailing misconceptions of chance).

bly plays a significant role in the popularity of lotteries.⁶² Consider, then, a policy that requires prominent posting of information about the odds of winning a lottery and of the real payoffs—in terms of the after-tax discounted present value of earnings—even perhaps some acknowledgement from purchasers that they have been exposed to this information. Since low probabilities are so difficult to represent cognitively, it may help to use graphical devices, metaphors (imagine choosing one ping-pong ball out of a large swimming pool filled with balls), or relative-odds comparisons (winning the lottery is about as likely as being struck by lightning in the next week). If people are purchasing lottery tickets with a full understanding of associated probabilities and payoffs, then providing such information would have absolutely no effect.⁶³ If, however, people are making cognitive errors, the information might help alleviate those errors.

As another example, consider “rent-to-own” establishments that lease consumer durables and furniture to, typically, low-income consumers.⁶⁴ Most states treat these contracts as rental agreements rather than loans, even though 70% of the time consumers eventually buy the products they rent.⁶⁵ As a result, firms are free from the regulations associated with loans, including regulations that cap interest rates. The final prices that consumers pay are high—typically two or three times normal retail price of the good—and the implicit interest rates, if one views these contracts as loans, are astronomical—100% per year or more.⁶⁶ An asymmetrically paternalistic regulation might force firms to clearly state the true cost of purchasing an item, along with the interest rate implied by doing so. Provision of such informa-

⁶² See, e.g., Timur Kuran & Cass R. Sunstein, *Controlling Availability Cascades*, in BEHAVIORAL LAW AND ECONOMICS, *supra* note 40, at 374, 374-76 (discussing ways in which the vividness of imagery distorts assessments of probability).

⁶³ While some people might object on the ground that reminding people of how long the odds are only “ruins their fun,” this is true only if their “fun” is based on a misperception. Hence, irrespective of whether this objection is valid, it is not consistent with traditional rational choice objections to paternalism.

⁶⁴ See generally Joseph P. Fried, *Rent-a-Center Charged with Price Gouging*, N.Y. TIMES, Aug. 23, 2001, at B8 (reporting that electronic equipment rented to the poor had base charges of approximately three times the suggested retail price); David Leonhardt, *Economic View: TV's, DVD's: All Yours, but First Do the Math*, N.Y. TIMES, Dec. 16, 2001, § 3, at 4 (claiming that rent-to-own companies selling to customers with little or no credit often mask the true cost of their products).

⁶⁵ James M. Lacko et al., Federal Trade Commission Bureau of Economics Staff Report: Survey of Rent-to-Own Customers, at ES-1 (2000), available at <http://www.ftc.gov/reports/index.htm>.

⁶⁶ *Id.* at ES-3 to ES-5.

tion would help consumers who would otherwise enter the transaction without understanding the economic ramifications, while not affecting those who understand the true cost from the beginning.

A third class of examples involves misperceptions of compounding. Many studies show that people underestimate how rapidly growth rates compound. A typical heuristic is to assume linear growth, so that a process which grows at a rate of 1% per year doubles in 100 years, but this significantly underestimates the compounding effect of interest. A little instruction in how rapidly compounding occurs could benefit consumers who run up credit card debts.⁶⁷

While the examples above suggest where new asymmetrically paternalistic policies might be useful, there are some realms, to which we now turn, in which similar asymmetrically paternalistic policies already exist.

1. Consumer Protection

The most ubiquitous and recognizable form of existing asymmetrically paternalistic regulation involving framing and information disclosure is the provision of information to consumers mandated by disclosure legislation. Home-buyers, mortgagers, and lessees are all subject to a barrage of text detailing terms and costs. In some cases, documents require multiple signatures verifying that the relevant party has read and absorbed the information. The standard justification for such disclosure regulations is that they will protect consumers from unscrupulous and deceitful sellers and lenders while simultaneously fostering a more competitive market place by encouraging a better informed consumer who will, hopefully, act more properly in her own best interest.

The Federal Truth in Lending Act (Act),⁶⁸ a key component of the Consumer Credit Protection Act,⁶⁹ served as the starting point for this type of legislation. One of its express purposes was to promote the "informed use of credit" through an "awareness of . . . cost[s] . . . by consumers."⁷⁰ This "meaningful disclosure" in turn had two goals: (1)

⁶⁷ See DAVID LAIBSON ET AL., A DEBT PUZZLE 2 (Nat'l Bureau of Econ. Research, Working Paper No. 7879, 2000) ("[A]verage [credit card] debt per household rises to over \$6,000. . . . [A]t least 63% of all households with credit cards are borrowing (i.e., paying interest) on those cards." (citation omitted)).

⁶⁸ 15 U.S.C. §§ 1601-1667f (2000).

⁶⁹ *Id.* §§ 1601-1693.

⁷⁰ *Id.* § 1601(a).

to enable the consumer to compare credit terms and, thereby, make an informed choice among available credit offers; and (2) “to protect the consumer against inaccurate and unfair credit billing and credit card practices.”⁷¹

These twin aims reflect the kind of asymmetric paternalism that we are seeking to promote. The Act provides potentially substantial benefits to those who are less than rational; it may save some consumers, otherwise uninformed, from possible catastrophic outcomes, such as losing their homes. These benefits are obtained at minimal cost to both informed consumers and providers. Educated consumers essentially ignore the mandated disclosures while uneducated consumers could potentially reap the positive benefits of additional information. As for providers, financial institutions and other service providers have developed forms setting forth the required information to ensure compliance with state and federal disclosure laws. Any early costs incurred with the initial creation of the disclosure forms appear minimal when amortized. Even documents that detail individual costs that must be customized for each consumer are easily generated today via computer, and impose a minimal burden on providers.

By way of example, consider how the Act governs required disclosures for home mortgages.⁷² Financial institutions must provide potential borrowers with terms such as the annual percentage rate and the monthly payment.⁷³ In addition, the creditor must explicitly inform the borrower what it means to take out a mortgage: “If you obtain this loan, the lender will have a mortgage on your home. You could lose your home, and any money you have put into it, if you do not meet your obligations under the loan.”⁷⁴ This last declaration exemplifies asymmetric paternalism: it imposes little cost on the financial institution to reproduce a form disclosure document. The informed consumer will already be aware of the consequences of defaulting on a mortgage, so she will not be helped by the regulation, but neither will she be adversely affected. For the naive consumer, the disclosure can be enormously beneficial, moving her one step closer to educated consumer status.

Over the years, the Act has generated a multilayered statutory framework of disclosure regulation on both the federal and state level.

⁷¹ *Id.*

⁷² See *id.* § 1639 (listing specific disclosures such as the risk of losing one’s home for failure to satisfy mortgage obligations).

⁷³ *Id.* § 1639(a)(2).

⁷⁴ *Id.* § 1639(a)(1)(B).

In so doing, its reach has expanded beyond basic credit practices to encompass various types of sales and other arrangements. Both federal and state legislation require credit and other service providers to provide two types of information to potential consumers: (1) the terms of the credit or other arrangement; and (2) the costs associated with the extension of credit or other purchase.⁷⁵

State laws complement the Act by regulating the disclosure of fees and costs. Returning to the mortgage context, states typically require lenders to disclose the itemized costs of obtaining the loan, such as credit reports, appraisals, insurance, taxes, and escrow fees.⁷⁶ States have also expanded on the federal legislation by requiring similar disclosures in a variety of other loan situations, including reverse mortgages,⁷⁷ insurance premium financing,⁷⁸ title loans,⁷⁹ home equity loans,⁸⁰ home improvement loans,⁸¹ and credit sales contracts.⁸²

Finally, in recent years, both federal and state governments have ventured beyond the credit context in requiring information disclosure. One significant development has occurred in the automobile industry. Over the last fifteen to twenty years, there has been an explosion in car leasing arrangements in lieu of the traditional outright purchase. Concerns arose over the lack of clarity in leasing terms and the perceived failure of consumers to fully appreciate the costs and other implications of leasing as opposed to purchasing. In response, the Federal Reserve Board implemented Regulation M pursuant to the Act, which governs all types of consumer leases.⁸³ More particu-

⁷⁵ See, e.g., *id.* § 1639(a)(2) (requiring disclosure of the annual percentage rate, amount, and variance of monthly payments); WASH. REV. CODE ANN. § 19.146.030 (West 1999) (listing the required disclosure elements, including percentage rates, cost-of-credit reports, and conditions of lock-in agreements).

⁷⁶ See, e.g., WASH. REV. CODE ANN. § 19.146.030(b) (West 1999) (containing an extensive list of items a mortgage broker must disclose).

⁷⁷ See, e.g., COLO. REV. STAT. § 11-38-109 (2001) (providing an example of disclosure necessary in a reverse mortgage).

⁷⁸ See, e.g., CAL. INS. CODE § 778.4 (West 1993) (detailing what information must be provided by an insurance broker).

⁷⁹ See, e.g., MONT. CODE ANN. § 31-1-818 (2001) (explaining the required disclosures for title loan agreements).

⁸⁰ See, e.g., 9 V.I. CODE ANN. § 142 (1998) (detailing consumer protection disclosures for home equity loans).

⁸¹ See, e.g., FLA. STAT. ANN. § 520.73 (West 1997) (listing information that must be disclosed for home improvement loans).

⁸² See, e.g., HAW. REV. STAT. § 476-4 (1993) (specifying the requirements for credit sale contracts).

⁸³ See 12 C.F.R. § 213.1 (2001) (addressing the “[a]uthority, scope, purpose, and enforcement” of Regulation M).

larly, many states have recently enacted legislation specific to automobile leasing. Such statutes typically require lessors to disclose the distinction between a lease agreement and a purchase agreement and to set forth both the monthly and total costs that the consumer will incur.⁸⁴ As with mortgage disclosures, leasing disclosure regulations are a prototype of asymmetric paternalism: compliance is easy and cheap, and neither consumers nor sellers are significantly restricted in their market activities.

There is, of course, much debate about how much information consumers can process and about the costs and benefits of providing information in specific settings. Any complete accounting of such regulations must take such costs into account. One important cost is the negative effect of new information on the likelihood of consumers paying attention to existing information as consumers begin to suffer from "information overload." When hammers start to sprout warnings of the danger they pose to thumbs, and ladders of the risk of falling, additional information confers ever smaller benefits and can actually backfire if it distracts consumers from more worthy warning messages.

Information can also have unintended consequences for feelings and behavior. As an example of an effect on feelings, providing information about the odds of winning the lottery would not serve a benefit if it fails to deter purchases yet makes purchasers feel stupid and decreases the enjoyment they get from playing. On the behavior side, it has been argued that, contrary to their stated aims, the food labeling acts that require retailers to display detailed facts about food content may have had little impact on consumer behavior, and may have even contributed to the epidemic of eating disorders in the United States.⁸⁵ The existence of such hidden costs does not argue against the principle of asymmetric paternalism, but does suggest that a very careful accounting of costs needs to be undertaken before de-

⁸⁴ See, e.g., HAW. REV. STAT. § 481L-2 (Supp. 2001) (listing the warnings a retail lessor is required to disclose to the lessee in the lease agreement); N.H. REV. STAT. ANN. § 361-D:4 (1995) (declaring certain warnings that must be included in motor vehicle leasing agreements).

⁸⁵ Some have disparagingly referred to this as the "Snackwell Effect," named for the fat-free cookie that appears to induce unrestricted consumption. See Catherine Censor Shemo, *Fake Fats, Real Threat*, VEGETARIAN TIMES, Feb. 1997, at 20 (describing effect of dieters being lulled by misunderstood food labeling information). Nor is there a clear health effect from greater nutritional information. Cf. Daniel Goleman, *Eating Disorder Rates Surprise the Experts*, N.Y. TIMES, Oct. 4, 1995, at C11 ("New studies suggest that both anorexia and bulimia are twice as frequent as shown in earlier studies and that the incidence is increasing steadily.").

claring a particular paternalistic regulation to be asymmetrically paternalistic.

2. Investor Protection

Another area in which policies that could be construed as asymmetrically paternalistic have already been implemented, or are under discussion, involves disclosure of financial information. The recent meltdown of Enron has led to vigorous cries for strengthening market safeguards to protect investors. The plight of the loyal Enron worker who saw her once robust retirement savings vanish virtually overnight has spawned a wave of proposed legislation aimed at revamping the structure and management of company 401(k) plans pursuant to ERISA.⁸⁶ The goal, as expressed by Representative Ken Bentsen, is "to prohibit knowing misrepresentations by fiduciaries of 401(k) plans which may induce participants and beneficiaries to act contrary to their own best interest in controlling the assets in their own accounts."⁸⁷ Why did the Enron 401(k) plan wreak so much havoc? Part of the problem was lack of diversification: Enron's 401(k) plan was too heavily invested in the company's own stock.⁸⁸ As a result, when Enron failed, employees lost their retirement benefits along with their jobs. Recognizing this economic reality, the House of Representatives is currently considering the 401(k) Pension Right to Know Act of 2002, a bill designed to induce 401(k) portfolio diversification by employees by requiring plan sponsors to "advise[e] participants and beneficiaries of the importance of diversifying the investment of the assets in their accounts and of the risk of holding in their portfolios securities of any one entity, including employer securities."⁸⁹ The failure to so advise would be held a breach of fiduciary duty and would be penalized accordingly.⁹⁰

⁸⁶ See, e.g., S. 1992, 107th Cong. (2002) (proposing improvements to disclosure, account access, and accountability for retirement accounts); H.R. 3677, 107th Cong. (2002) (proposing new protections for 401(k) participants).

⁸⁷ Employee Savings Protection Act of 2002, H.R. 3623, 107th Cong. (2002).

⁸⁸ See 148 CONG. REC. H51 (daily ed. Jan. 24, 2002) (statement of Rep. Bentsen) (emphasizing the importance of protecting employee retirement plans from company mismanagement); 148 CONG. REC. H21 (daily ed. Jan. 23, 2002) (statement of Rep. Doggett) (describing the "blameless folks who lost their retirement savings in their 401(k) plan as a result of being locked in to relying on company stock by Enron management").

⁸⁹ H.R. 3642, 107th Cong. (2002).

⁹⁰ *Id.* § 2 ("Any failure by a plan administrator to carry out the requirements [of the Act] shall be treated as a failure by the plan administrator to carry out the plan

This requirement to provide advice is a nice example of asymmetric paternalism. The educated and informed investor already understands the economists' advice and hence is not affected. The less-savvy investor, on the other hand, will hopefully not fall prey to another Enron. By heeding the call for diversification, market flaws will be corrected at a greatly reduced cost to society at large.

3. Similar Regulatory Strategies

Many existing policies can be interpreted as asymmetrically paternalistic, though not conceived as such. For example, consider the case of licensing requirements, both for certain categories of professionals, such as physicians, and for certain activities, such as driving a car. Some critics of such requirements, such as Milton Friedman, have argued that these requirements are unnecessary because, in the former case, people can be relied upon to gather information about physician quality and, in the latter case, dangerous drivers can be relied upon to stay off the roads.⁹¹ The more common view, Milton Friedman notwithstanding, is that people who pose a menace to themselves or others can neither be relied upon to gather adequate information about the competence of a physician nor keep themselves off the roads. The beauty of licensing requirements is that if they are truly diagnostic and inexpensive to administer, they impose minimal costs on those who are actually competent, but present a serious obstacle to those who are not.

Similarly, there are conservatively paternalistic policies that *withhold* information and are justifiable on similar grounds. Information withholding makes sense when it would not or should not prove useful to fully rational people—those who process information in the fashion assumed by economics—and is subject to misuse by others. As an example, consider various forms of “blind” review intended to avoid bias, such as grading students' papers without visible names. If people are not biased, blind review introduces hardly any costs, but if reviewers are biased, the benefits can be significant.

administrator's fiduciary duties . . .”).

⁹¹ See MILTON FRIEDMAN, *CAPITALISM AND FREEDOM* 137-60 (1962) (arguing that occupational licensing is an undesirable interruption of market forces).

C. Cooling Off

When people are in transient emotionally or biologically “hot” states, they sometimes make decisions that are costly or even impossible to reverse.⁹² People buy cars they cannot quite afford after breathing in the intoxicating new-car smell during a test drive. Others get married in the heat of passion or commit suicide when depression is particularly intense. Since the current state of mind may be a real source of well-being, responding to it is not per se a mistake. But behavioral economists have suggested a variety of reasons why people might respond to hot states in suboptimal ways.⁹³ For instance, people in hot states tend to overestimate how long those states will last, a phenomena that Loewenstein in one article refers to as a “hot-to-cold empathy gap,”⁹⁴ and that Loewenstein, O’Donoghue, and Rabin in another article label “projection bias.”⁹⁵ The core insight is that people may also have self-control problems that lead them to overweigh the short-term benefits of indulging their current state of mind.⁹⁶

⁹² Loewenstein, *supra* note 22, at 273 (arguing that “an excessive influence of visceral factors” leads to self-destructive behavior such as “overeating, sexual misconduct, substance abuse, and crimes of passion”).

⁹³ *See id.* at 276 (noting a number of findings that suggest that visceral influences “operate independently of, and overwhelm, individual deliberation and volition”).

⁹⁴ *See* George Loewenstein et al., *The Effect of Sexual Arousal on Expectations of Sexual Forcefulness*, 34 J. RES. CRIME & DELINQ. 443, 445-47 (1997) (applying the empathy gap to the rational choice model of crime by testing how young males in various states of sexual arousal predict how coercively they will act in sexual situations); *see also* George Loewenstein, *Emotions in Economic Theory and Economic Behavior*, 90 AM. ECON. REV. 426, 428-31 (2000) (considering the application of immediate or visceral feelings to economic behavior, including a discussion as to the effect of the “hot-cold empathy gaps” in which it is difficult to imagine oneself in a cold state while in a hot state); Leaf Van Boven & George Loewenstein, *Social Projection of Transient Visceral Feelings*, PERSONALITY & SOC. PSYCHOL. BULL. (forthcoming 2003).

⁹⁵ *See* GEORGE LOEWENSTEIN ET AL., PROJECTION BIAS IN PREDICTING FUTURE UTILITY 4 (Univ. of Cal. Berkeley Dep’t of Econ., Working Paper No. E00-284, 2000) (defining projection bias as “falsely projecting . . . current transient preferences on to the future”), at <http://iber.berkeley.edu/wps/econ/e00-284.pdf>; *see also* George Loewenstein & David Schkade, *Wouldn’t It Be Nice? Predicting Future Feelings*, in WELL-BEING: THE FOUNDATIONS OF HEDONIC PSYCHOLOGY 85, 94-98 (Daniel Kahneman et al. eds., 1999) (explaining several sources of error in predicting one’s feelings in the future); Loewenstein, *supra* note 22, at 289 (emphasizing the importance of including visceral factors in decision-making models).

⁹⁶ *See, e.g.*, Laibson, *supra* note 22, at 444-45 (suggesting that certain commitment mechanisms, such as 401(k) plans, can overcome a lack of self-control); O’Donoghue & Rabin, *supra* note 22, at 106 (modeling present bias preferences under which

In response to hot and hasty decision making, cooling-off periods that force people to delay taking action for some duration—and in particular, allow them to reevaluate their decisions free from heat-of-the-moment impulses—could be useful. The following simple framework helps illustrate the costs and benefits of cooling-off periods. Let μ denote the net benefits from undertaking some action now, so that fully rational people undertake the activity when $\mu > 0$. Suppose there are also some boundedly rational people who experience true net benefits μ ; because of one or more of the errors mentioned above, however, those people undertake the activity when $\mu + \varepsilon > 0$, and so may be hurting themselves by as much as ε (some error value which occurs when individuals act despite $\mu < 0$). Now, consider a cooling-off period that requires a delay before the action is undertaken, and let μ' denote the net benefits from undertaking the action after the delay. The potential benefit of the cooling-off period is that some irrational types might reverse a costly decision to undertake the action, and hence benefit by as much as ε . The cooling-off period, however, has two potential costs: First, people who undertake the action regardless of the cooling-off period, whether rational or irrational, are hurt by $\mu - \mu'$, equal to the amount by which the delay reduces their net benefits. Second, some people for whom the action is on net beneficial ($\mu > 0$) may be deterred from the activity; if so, they suffer at most $\mu - \mu'$. Hence, a cooling-off period may be valuable when the utility loss due to errors, ε , is large while the lost benefit from a delay, $\mu - \mu'$, is small.⁹⁷

Cooling-off periods appear more intrusive than our earlier policies, and should thus be implemented with much greater reticence and only after careful analysis. Nevertheless, when implemented selectively, cooling-off periods may reflect good examples of asymmetric paternalism. In many instances, they impose minimal costs if people are rational—the cost of delaying the purchase of a car by a few days,

“stronger relative weight [is given] to the earlier moment as it gets closer”); David Isaac Laibson, *Hyperbolic Discounting and Consumption* 9 (1994) (unpublished Ph.D. dissertation, Massachusetts Institute of Technology) (on file with the M.I.T. Libraries) (arguing that human preferences, as modeled by the hyperbolic discount function, “set[] up a conflict between today’s preferences and the preferences which will be held in the future”), available at <http://theses.mit.edu/Dienst/UI/2.0/Describe/0018.mit.theses%2f1994-72?abstract=>.

⁹⁷ The status quo effect discussed above might limit the benefits of cooling-off periods. To the degree that people exhibit a bias in favor of the status quo, they will refrain from reversing a harmful decision on some occasions even though the cooling of their ardor would otherwise have led them to do so.

or of delaying a marriage by a few weeks, is not plausibly large. At the same time, cooling-off periods protect those people who make decisions in the heat of the moment. Below, we consider several examples where we believe these conditions are satisfied—and in which legislators appear to share our opinion.

Cooling-off periods take two different forms. They could force people to delay action until after a cooling-off period. Alternatively, they could enable immediate decisions but render them reversible during a cooling-off period. To illustrate the difference, consider a three-day cooling-off period for the purchase of a new car. Under the first form, when a person signs a contract to buy a car, they must wait three days before taking possession of the car (and can change their mind during this period). Under the second form, the person can take possession of the car immediately, but can return it within three days. Clearly, decision-reversal periods are less costly to the individuals making the decision than mandatory time delays. But in many situations, decision-reversal periods are either not feasible—it is impossible, for example, to undo unsafe sex or suicide—or too costly to implement—for example, when using a purchased good during the cooling-off period causes significant depreciation in the value of the good. But for many important life decisions such as marriage, divorce, and suicide, even mandatory delays are not particularly costly.

The beneficial effects of cooling-off periods may extend beyond those incurred by people who directly take advantage of these periods. In the absence of cooling-off periods, people who benefit from others' hot decisions, such as insurance and automobile salespersons, have an incentive to instill such agitated states. The fact that consumers will have an opportunity to cool off may decrease sellers' incentive for encouraging agitation, particularly if there is a cost to the seller when the consumer pulls out of the deal. Indeed, if such a cost is sufficiently large, then sellers may actually take pains to ensure that the consumer is not only cool, but has deliberated about the costs and benefits of the purchase.

Framed in this fashion, it is striking how readily a variety of regulatory approaches may be cast as providing introspective reexamination free from heat-of-the-moment impulse.

1. Consumer Protection

Concern that consumers, in certain predictable situations, are prone to make hasty, uninformed decisions has led to extensive consumer protection regulation at both the federal and state levels. The

most comprehensive scheme exists with respect to home solicitation sales (the once ubiquitous door-to-door salesman). In 1972, the Federal Trade Commission, concerned about high-pressure sales tactics, enacted a rule imposing a cooling-off period for all door-to-door sales. All such sales must be accompanied by a written statement informing the buyer that she has the right to rescind any purchase within three business days of the transaction.⁹⁸ Most states have followed the FTC's lead and enacted similar legislation. While some permit the buyer to waive the cooling-off period under certain conditions,⁹⁹ the majority of states make clear that this brand of legislative paternalism is non-waivable.¹⁰⁰

Many states have gone beyond the FTC requirement of a three-day cooling-off period for home solicitation sales to impose extended cooling-off periods in specific instances. Presumably, such regulations reflect an added measure of paternalism—a feeling that certain groups of people and/or services demand additional protection. Senior citizens have been particular beneficiaries of these state laws. Anyone who has watched television in the past fifteen years remembers the commercial featuring the unfortunate elderly woman lying helpless on the floor. She is saved by an emergency response bracelet activated by the memorable plaintive wail: “Help! I’ve fallen and I can’t get up.” In 1992, California responded to the popularity of those units by giving a buyer *seven* days to cancel a door-to-door sale of a personal emergency response unit.¹⁰¹ Other states have mandated cooling-off periods for home food service plans,¹⁰² home solicitation

⁹⁸ See *FTC Rule Concerning Cooling-Off Period Made for Sales at Homes or at Certain Other Locations*, 16 C.F.R. § 429.1(a) (2002) (requiring that the front page of the contract specify that the buyer “may cancel this transaction at any time prior to midnight of the third business day”).

⁹⁹ See, e.g., ALA. CODE § 5-19-12(c) (1975) (“The provisions of this section shall not apply if the buyer furnishes the seller with a separate dated and signed personal statement describing an emergency requiring an immediate remedy and modifying or waiving his right to cancel.”); KAN. STAT. ANN. § 50-640(c)(1)(C) (1994) (providing that in the event of a bona fide emergency, the consumer may furnish the seller with a statement waiving her right to cancel within three business days).

¹⁰⁰ See, e.g., ARIZ. REV. STAT. ANN. § 44-5002(D) (West 1994) (“Any provision of a contract, offer or agreement that waives a buyer’s right to cancellation under this section is void and has no effect.”).

¹⁰¹ See CAL. CIV. CODE § 1689.6(b) (West Supp. 2002) (“[A] buyer has the right to cancel a home solicitation contract or offer for the purchase of a personal emergency response unit until midnight of the seventh business day . . .”).

¹⁰² See, e.g., ME. REV. STAT. ANN. tit. 9-A, § 3-502(1-A) (West 1997) (instructing that a first-time buyer has the right to cancel a home food service plan prior to the delivery of any food and up until midnight of the tenth day after the purchase agreement was

purchases by senior citizens,¹⁰³ adult and vocational education programs,¹⁰⁴ solicited charitable contributions,¹⁰⁵ health studio service contracts,¹⁰⁶ and campsite time-shares.¹⁰⁷

Congress has also stepped in to require cooling-off periods in certain instances. For example, it enacted a cooling-off period for home equity loans by granting buyers a limited right to rescind certain credit transactions involving the buyer's principal dwelling as a security interest.¹⁰⁸ More recently, Congress imposed a waiting period on any employee waiver of rights under the Age Discrimination in Employment Act (ADEA).¹⁰⁹ That legislation was prompted by the need to ensure that any action on the part of the employee was "knowing and voluntary" and not hasty or coerced.¹¹⁰

Under normal conditions, this type of protectionist legislation might seem overly paternalistic. However, all of the above regulations target specific transactions where experience has shown that consumers are likely to act under influences other than rational decision making. These regulations likely impose costs on sellers, but the greatest costs focus on those sellers who benefit from consumers making hasty, ill-conceived decisions in the heat of the moment.

signed).

¹⁰³ See, e.g., N.D. CENT. CODE § 51-18-02(1) (1999) (providing that a buyer sixty-five years of age or older has fifteen business days to cancel a home solicitation contract).

¹⁰⁴ See, e.g., 105 ILL. COMP. STAT. ANN. 425/15.1a(1)(a) (West Supp. 2002) (establishing that a student has before midnight of the fifth business day after enrollment to cancel and receive a full tuition refund).

¹⁰⁵ See, e.g., COLO. REV. STAT. § 6-16-106(1)(b) (2001) (granting an individual the right to cancel her monetary contribution until midnight of the third business day, or midnight of the first business day if the contribution was non-monetary).

¹⁰⁶ See, e.g., CAL. CIV. CODE § 1812.85(b)(1) (West 1998) (mandating that a contract for health studio services must be cancelable at any time prior to midnight on the third business day).

¹⁰⁷ See, e.g., ARK. CODE ANN. § 18-14-703(a) (Michie Supp. 2001) (providing that the buyer of a camping site time-share has until midnight of the fifth business day to cancel the purchase).

¹⁰⁸ See 15 U.S.C. § 1635(a) (2000) (giving a borrower the right to cancel any consumer credit transaction involving her principal dwelling as a security interest before midnight of the third business day after the agreement was completed).

¹⁰⁹ See 29 U.S.C. § 626(f)(1)(G) (2000) (requiring that an agreement to waive one's rights may be revoked up to seven days after its inception).

¹¹⁰ See *id.* § 626(f)(1) ("[A]n individual may not waive any right or claim under this chapter unless the waiver is knowing and voluntary . . .").

2. Family Law

This cooling-off form of asymmetric paternalism also extends beyond consumer protection. For example, many states have statutes that force potential newlyweds to wait a short period of time after their license has been issued before they can tie the knot.¹¹¹ Once married, couples often cannot receive a divorce decree until after a mandatory waiting period, which is typically much longer than the pre-marriage delay.¹¹² The justification for these regulations sounds familiar: "Important decisions should not be made in haste or under the influence of a powerful and potentially distorting passion."¹¹³ However, in addition to the considerable benefit these regulations provide couples who act hastily in their decisions to marry or divorce, one should note that they impose very little cost on a couple making rational decisions. How onerous can a one- or two-week delay be in the context of a marriage that is supposed to last a lifetime? Even Dean Anthony Kronman, who generally finds cooling-off periods "anti-democratic," notes that they are particularly justifiable in the context of formation or dissolution of a marriage because the waiting period has few adverse consequences.¹¹⁴ Thus, such waiting periods are justified when they are short enough not to stand as a substantial barrier to those making good decisions, but long enough to enable people to make informed, rational choices.¹¹⁵

3. Settlement Agreements

Cooling-off periods are frequently imposed in mediated settlement agreements.¹¹⁶ An important concern here, which has very little

¹¹¹ See, e.g., N.Y. DOM. REL. LAW § 13-b (McKinney 1999) ("A marriage shall not be solemnized within twenty-four hours after the issuance of the marriage license . . .").

¹¹² See, e.g., CONN. GEN. STAT. ANN. § 46b-67(a) (West 1995) (requiring married couples to wait ninety days after the filing of a complaint for dissolution or legal separation before court proceedings may continue).

¹¹³ Kronman, *supra* note 7, at 788.

¹¹⁴ See *id.* at 796 (explaining that a waiting period for marriage or divorce has less serious consequences than a contractual relationship where timing is essential).

¹¹⁵ Cf. *id.* (observing that cooling-off periods for marriage and divorce are warranted (1) because they allow time to overcome clouded judgment caused by the passions likely associated with such decisions; and (2) because speed is usually not essential to a marriage or divorce contract).

¹¹⁶ See, e.g., CAL. INS. CODE § 10089.82(c) (West 2001) (giving the insured three days to rescind an agreement in an earthquake insurance mediation); FLA. R. CT. 12.740(f)(1) (giving counsel not present during family mediation a period of ten days to reject the agreement); MINN. STAT. ANN. § 572.35(2) (West 2001) (ordering a sev-

to do with people making errors, is to protect the legal rights of unwitting laymen. Mediated settlement agreements are often reached by the mediator and parties without the presence of legal counsel. As a result, the potential exists for the parties to misconstrue the terms and implications of the agreement. Moreover, a mediated settlement agreement can adversely affect the parties' existing legal rights.¹¹⁷ The mediator's function is to generate a resolution, not to protect the parties' particular interests.¹¹⁸ But a second concern here, very much in line with behavioral economics, is that the parties may feel pressured to accept a bargain into which they would not otherwise enter.¹¹⁹ Cooling-off periods seem sensible in this environment since short delays would likely impose minimal costs, while allowing the parties time to reevaluate their decisions.

4. Other Potential Applications

Cooling-off policies are potentially useful in any situation featuring transient hot states that cause people to make distorted decisions and produce consequences that are difficult to reverse. One such situation is suicide. The human mind is perversely constituted such that, when one is unhappy, it is difficult to generate happy thoughts or memories.¹²⁰ As a result, people who suffer depressive episodes report that they lose perspective and have difficulty either imagining ever feeling better or recalling that they ever felt better in the past.¹²¹ Un-

enty-two-hour delay before a creditor-debtor mediation agreement becomes binding).

¹¹⁷ E.g., MINN. STAT. ANN. § 572.35(1)(b) (West 2001) (acknowledging that "signing a mediated settlement agreement may adversely affect [parties'] legal rights").

¹¹⁸ See *id.* § 572.35(1)(a) (stating that "the mediator has no duty to protect [party] interests").

¹¹⁹ Fear of embarrassment can be an extraordinarily potent force in daily behavior. See LEAF VAN BOVEN ET AL., *THE ILLUSION OF COURAGE: UNDERESTIMATING SOCIAL-RISK AVERSION IN SELF AND OTHERS* (Working Paper, n.d.) (on file with authors). In general, very small incentives can have a disproportionate impact, if they are immediate. For example, cocaine addicts have been treated successfully by offering them very small daily rewards for abstinence, even though one would expect the magnitude of such an addiction to overshadow such small rewards. See Michael D. Mueller, *Voucher System Is Effective Tool in Treating Cocaine Abuse*, NIDA NOTES, Sept.-Oct. 1995, at 8 (describing a treatment program in which cocaine abusers receive vouchers that can be exchanged for items when they test negative for cocaine), available at <http://www.nida.nih.gov/NIDA%5FNotes/NNVol10N5/Voucher.html>.

¹²⁰ Gordon H. Bower, *How Might Emotions Affect Learning?*, in *THE HANDBOOK OF EMOTION AND MEMORY: RESEARCH AND THEORY* 3, 20-23 (Sven-Ake Christianson ed., 1992) (explaining that unhappy people dwell on unhappy subjects and memories).

¹²¹ Andrew Solomon, *Personal History: Anatomy of Melancholy*, NEW YORKER, Jan. 12, 1998, at 49 (explaining that in a depressed state, "[y]ou can neither remember feeling

able to imagine feeling better, suicide may feel like the only escape. Studies of terminally ill patients likewise show that the will to live fluctuates dramatically from hour to hour, suggesting that patients are unable to bridge the gap between fluctuating emotional and health states.¹²²

The fact that suicide is currently illegal marks a classic form of heavy-handed paternalism (and is, in any case, difficult to enforce). An alternative policy suggested by asymmetric paternalism is to sanction suicide, but only after a mandatory cooling-off period. Such a policy might, for example, require a suicidal person to "give notice" of the desire to commit suicide one month in advance with the ability to rescind the notice at any point during the intervening period (once rescinded, it would have to be reinitiated to go into effect again). Such a policy imposes costs on those whose situation is so miserable that the intervening month would be one of unremitting misery. However, a month of misery does not seem excessively onerous for such a momentous decision. Moreover, such a policy is clearly less costly in these terms than the current blanket prohibition against suicide. Even a society unwilling to countenance suicide for the chronically depressed might employ an asymmetrically paternalistic approach to the controversial issue of assisted suicide. In cases of painful terminal illness, for example, momentary despondency or even pressure from anguished relatives could be alleviated by stretching out the time horizon over when decisions need to be made. We do not claim, of course, that concerns about impulsive hot-state behavior are the sole, or even the primary, source of controversy in the debates over suicide and assisted suicide. Our claim is only that this aspect of the debate could be confined by a less heavy-handed regulatory tool than outright prohibition.

Another situation with similar characteristics is drug use. Scholars recognize that "*craving* is a motivational state . . . equated with the subjective desire for the effects of a drug."¹²³ Craving, like depression, not only motivates certain behaviors, but it crowds out virtually all considerations other than, in this case, drug taking. In a neurological study of addiction, Frawley refers to a "process of . . . increasing the behavior that facilitates drug or alcohol use and eliminating behavior that

better nor imagine that you will feel better").

¹²² Erica Goode, *Terminal Cancer Patients' Will to Live Is Found to Fluctuate*, N.Y. TIMES, Sept. 4, 1999, at A8 (discussing a study in which cancer patients showed substantial fluctuations in their will to live).

¹²³ G. Alan Marlatt, *Craving Notes*, 82 BRIT. J. ADDICTION 42, 42 (1987).

interferes with or does not lead to drug or alcohol use. This leads to a kind of 'tunnel vision' on the part of the addict."¹²⁴ This effect is most dramatically evident in the behavior of cocaine addicts, who report that "virtually all thoughts are focused on cocaine during binges; nourishment, sleep, money, loved ones, responsibility, and survival lose all significance."¹²⁵

An interesting feature of craving is that it drastically affects people's decisions about present actions, but has comparatively little effect on decisions involving only future outcomes. Thus, an addict might be willing to pay a tremendous amount to obtain a drug immediately, but would not agree to pay such a large amount for the drug in the future.¹²⁶ This suggests a policy lever less drastic than banning drugs and more asymmetrically paternalistic: dispense drugs legally with a mandatory waiting period (much as a pharmacy takes time to fill a prescription).¹²⁷ This kind of forced waiting provides a way to protect the future self from the craving current self. Since perfectly rational users will plan ahead, the forced delay imposes little cost and it may benefit drug users who are able to make comparatively rational decisions for the future.

Cooling-off periods may also be utilized in the public domain in circumstances in which appeals to an emotional hot state are distrusted. If we return to Madison's concerns in *The Federalist No. 10* over political institutions succumbing to "passion," the public policy implications of political hot states becomes apparent.¹²⁸ As a result, many constitutional regimes impose a cooling-off period, either ex-

¹²⁴ P. Joseph Frawley, *Neurobehavioral Model of Addiction: Addiction as a Primary Disease*, in VISIONS OF ADDICTION: MAJOR CONTEMPORARY PERSPECTIVES ON ADDICTION AND ALCOHOLISM 25, 32 (Stanton Peele ed., 1988).

¹²⁵ Frank H. Gawin, *Cocaine Addiction: Psychology and Neurophysiology*, 251 SCIENCE 1580, 1581 (1991).

¹²⁶ L.A. GIORDANO ET AL., OPIOID DEPRIVATION AFFECTS HOW OPIOID-DEPENDENT OUTPATIENTS DISCOUNT THE VALUE OF DELAYED HEROIN AND MONEY (Carnegie Mellon University, Dep't of Soc. & Decision Scis., Working Paper, n.d.) (on file with authors).

¹²⁷ Many states regulate liquor sales in a similar way, by restricting hours and days of sale. See, e.g., 47 PA. CONS. STAT. ANN. § 4-492(4) (West 2002) (making it illegal to "sell malt or brewed beverages between the hours of twelve o'clock midnight of any Saturday and two o'clock in the forenoon of the following day"). This effectively requires an alcoholic to plan ahead, which protects alcoholics who only drink on unplanned binges.

¹²⁸ THE FEDERALIST NO. 10, at 48 (James Madison) (Clinton Rossiter ed., 1999) ("Where a majority is included in a faction, the form of popular government . . . enables it to sacrifice to its ruling passion or interest both the public good and the rights of other citizens.").

press or tacit, before constitutional change can be implemented. This can take the form of an express delay in constitutional amendments, as with the Finnish and French requirements that two successive legislatures vote on any proposed changes to the constitution.¹²⁹ It can also take the form of procedural hurdles that in effect require a sustained effort to effectuate change, as with the high barriers to constitutional amendment under the U.S. Constitution.¹³⁰

D. *Limitations on Consumer Choice*

Consumers sometimes make suboptimal decisions that cannot be counteracted by changing the default, providing information, or letting them reconsider for a few days. In such situations, they may benefit from limits on the choices they face. While such policies are clearly the most intrusive of the policies we discuss, the same principles can apply: we look for “conservative” limits that likely provide a high benefit to boundedly rational types and a low cost to rational types. But, since limiting choices clearly hurts rational types, we need to be even more careful in analyzing whether such policies are, in the net, beneficial.

An example is the imposition of deadlines to combat procrastination. A theme in the research on behavioral decision making is that people tend not to take an integrated approach to decision making, but rather make decisions using an isolated, day-by-day, or case-by-case approach.¹³¹ One manifestation of this tendency to take the narrow view is “procrastination.”¹³² For those few abnormal readers who have never procrastinated, Sabini and Silver describe it vividly:

¹²⁹ See, e.g., FIN. CONST. § 73 (requiring suspension of consideration of non-urgent constitutional proposals until after following parliamentary election); LA CONST. art. 89 (Fr.) (requiring, in most cases, passage of amendments by two assemblies followed by submission to a referendum).

¹³⁰ U.S. CONST. art. V (requiring that proposed amendments be approved by two-thirds of both the House and Senate as well as three-fourths of the states).

¹³¹ See, e.g., Daniel Read et al., *Choice Bracketing*, 19 J. RISK & UNCERTAINTY 171, 191 (1999) (arguing that an integrated approach to decision making generally leads to better outcomes than a case-by-case approach does).

¹³² For economic models of procrastination, see George A. Akerlof, *Procrastination and Obedience*, 81 AM. ECON. REV. 1, 6-7 (1991). See also O'Donoghue & Rabin, *supra* note 42, at 148 (discussing the effects of “naïve procrastination” both in the abstract and in “important economic contexts”); O'Donoghue & Rabin, *supra* note 22, at 119 (“When costs are immediate, you tend to procrastinate; if you are aware that you will procrastinate in the future, that makes you perceive it as more costly to procrastinate now.”); Ted O'Donoghue & Matthew Rabin, *Incentives for Procrastinators*, 114 Q.J. ECON.

Imagine you have two days to write a paper. You believe it will take about six hours. To avoid being rushed, you decide to get to work. . . . Now suppose you had to decide what to do for the next five minutes—either work on the paper or play one game of pinball In the short run, five minutes of pinball is far more pleasurable than five minutes of paper writing, and after all, how much of a paper can you do in five minutes? Pinball is the obvious choice. The game is over so you must decide about the next five minutes. The situation is only trivially changed, so you will reach the same result. Once . . . you've fragmented your night into five minute intervals, you may be doomed to play until you run out of money, the machine breaks, or someone meaner than you wants to play. . . . One of the ways of being irrational and procrastinating is to act on *rational* calculations for intervals that are irrationally short.¹³³

In the face of procrastination, an asymmetrically paternalistic policy might involve imposing periodic deadlines on decision making that limit a person's ability to constantly plan to do something in the very near future.

Consider, for instance, a person who has some money that she would like to invest. Suppose she knows where she would like to invest it, and it is just a matter of taking the time to make the investment. If she can make the investment on any day she likes, then she may procrastinate doing so because she keeps delaying today based on a mistaken belief that she will make the transfer within a few days. Suppose instead that deadlines are imposed such that her financial transactions are implemented only on the first of every month. As the first of the month approaches, she will be forced to recognize that the cost of delaying past the first is not a few days, but rather an entire month. Hence, she may be motivated to act. Of course, such a policy imposes a cost on fully rational types because they may be forced to wait a few weeks before implementing an optimal financial transaction. But, much as for the short delays associated with cooling-off periods, as long as the frequency is not too small, such costs will be relatively small.

It is perhaps useful to attach numbers to this example. Suppose a person has \$10,000 to invest and plans to invest this money in a fund that will yield a 10% APR (continuously compounded). In this situation, the cost of a one day delay is \$2.75 of interest, and therefore, a person could easily prefer making the investment tomorrow rather than today. Now apply the deadlines discussed above (she can only

769, 770 (1999) (considering the role of procrastination in the context of economic incentive schemes).

¹³³ JOHN SABINI & MAURY SILVER, *MORALITIES OF EVERYDAY LIFE* 133 (1982).

invest on the first of the month) and consider a person's decision at the deadline. Because delay at the deadline means that the investment will not be implemented for (at least) thirty days, the cost of delay is now (at least) \$82.53. Therefore, the person will be more motivated not to delay.¹³⁴

Of course, whether such a policy is on net beneficial is more debatable than for some of our previous policies. The same \$82 cost that motivates irrational types to act also represents the (maximum) potential cost to rational types who would otherwise find it optimal to make the investment in the middle of the month. This cost is small, but is certainly not negligible. On the flip side, the benefit of this policy depends on how long people would delay in the absence of the policy. If the answer is only a few months, then the benefit is small—on the order of a few hundred dollars of lost interest. But if people would delay several years—which we suspect (partly from personal experiences) is not implausible—then the benefit is large—on the order of several thousand dollars of lost interest. These numbers illustrate the point we discuss above: for more intrusive asymmetrically paternalistic policies that limit consumers' choices, a more careful analysis is required to assess the net benefits.

A real-world example of the effects of deadline changes comes from the Economic and Social Research Council of Great Britain. They recently eliminated submission deadlines and now accept grant proposals on a "rolling" basis (though they are still reviewed only periodically); in response to this policy change, submissions actually declined by about 15-20%.¹³⁵

Another real-world example—one not usually framed in these terms—is the deadline for tax-exempt Individual Retirement Account (IRA) contributions. The law does not permit people to contribute any amount at any time they want. Rather, there is a maximum amount per year, and contributions for a given year must be made by a deadline—April 15 of the following year.¹³⁶ As a result, if people want to take advantage of a specific year's contribution, April 15 looms as a deadline. If IRA accounts are a valuable investment, then fully ra-

¹³⁴ For more numerical examples of this type, see O'Donoghue & Rabin, *Procrastination*, *supra* note 3, at 133.

¹³⁵ Letter from Chris Caswill, Economic and Social Research Council, to George Loewenstein (Aug. 15, 2001) (on file with authors).

¹³⁶ See 26 U.S.C.A. § 219(b)(5)(A) (West 2002) (setting maximum contribution amounts); *id.* § 6072(a) (requiring returns to be filed "on or before the 15th day of April").

tional people ought to invest in IRAs as early as possible so as to avoid paying taxes on the interest earned during the delay. Thus, this deadline should have little effect, except to lower total IRA contributions in cases where a person rationally would not want to make contributions one year but would want to make a larger contribution the following year. If, by contrast, people procrastinate, then the tax deadline may serve a valuable role in spurring people into last-minute action. Indeed, Lawrence Summers reports that 45% of 1984 IRA contributions were actually made in 1985.¹³⁷

A third example comes from recent experimental work by Dan Ariely and Klaus Wertenbroch.¹³⁸ Their subjects were M.I.T. executive-education students who had to write three short papers for a class. The subjects were assigned to one of two experimental conditions. In one condition, deadlines for the three papers were imposed by the instructor and were evenly spaced across the semester. In the other condition, each student was allowed to set her own deadlines for each of the three papers. In both conditions, the penalty for delay was 1% per day late, regardless of whether the deadlines were externally imposed or self-imposed.¹³⁹ While subjects in the free-choice condition did choose to impose deadlines on themselves, few of them chose evenly spaced deadlines, and those who did not performed worse in the course than those with evenly spaced deadlines (whether externally imposed or self-imposed).¹⁴⁰ These results demonstrate how imposing deadlines can benefit people who might otherwise suboptimally delay everything until the end of the semester. Of course, rational types may be hurt by being forced to write the paper sooner than would be optimal, but as long as the deadlines are not too severe, the costs to rational types should be relatively small.

CONCLUSION

Asymmetric paternalism aims to help boundedly rational people avoid making costly mistakes, while at the same time causing little or no harm to rational people. Thus far, we have documented a variety

¹³⁷ Lawrence H. Summers, *Summers Replies to Galper and Byce on IRAs*, 31 TAX NOTES 1014, 1016 (1986).

¹³⁸ Dan Ariely & Klaus Wertenbroch, *Procrastination, Deadlines, and Performance: Self-Control by Precommitment*, 13 PSYCHOL. SCI. 219 (2002).

¹³⁹ *Id.* at 220.

¹⁴⁰ *Id.* at 221.

of existing and potential regulatory responses that illustrate this concept. We conclude by discussing some broader issues.

What we propose is, in effect, not so much a new methodology for regulation, but rather a new metric for evaluating the costs and benefits of regulatory options. Our approach adds nuance to the debate over whether market transactions should be presumed to be rational or whether a predictable set of heuristic failings makes the case for a new "anti-antipaternalism." As with all matters dealing with human cognition and the design of social institutions, the answers are likely to be less than categorical. But a richer sense of the costs and benefits of regulation on individual market actors is a necessary step in the design of proper regulatory mechanisms.

In addition to the costs and benefits outlined above, an additional consideration is how the implementation of a policy will affect future policy decisions. In particular, a policy that currently appears undesirable may, after people have adapted to some interim policy, come to seem desirable. The potential for such "slippery slopes" commonly arises in policy debates and clearly arises here as well. But just as for other domains, the ideal way to deal with these possibilities is not to avoid policy changes altogether, but to consider the extent to which future policies are made to appear more or less attractive by the one under consideration.

A related problem is finding the optimum of the cost-benefit function.¹⁴¹ Why are home-solicitation "victims" allowed to cool off, but those who buy the same product at the mall are not? Why are eighteen-year-olds allowed to vote, but (in most states) not permitted to drink alcohol until age twenty-one? These numbers did not come from some neuroscientific evidence that the brain's ability to vote sensibly emerges at age eighteen but resistance to alcohol isn't full-blown until age twenty-one. Of course, all policymaking faces this challenge of drawing boundaries. Like these policies, good asymmetrically paternalistic policies should be simple and easy to enforce, and sensitive to errors in estimating costs and benefits. The fact that boundaries are hard to draw does not mean no boundary should be drawn.

Another important policymaking question is whether there are private incentives to supply the paternalistic interventions we describe. The crucial issue is whether people who make cognitive errors are aware of their mistakes. If consumers are aware of their errors then

¹⁴¹ See generally Zamir, *supra* note 6, at 256-61 (proposing a formal model for identifying efficient paternalistic regulation).

they will demand self-control and other external regulations on their own behavior, in which case they can (and often will) be privately supplied by firms. For instance, hotels can offer rooms without mini-bars to help alcoholics resist drinking, pizza delivery companies can allow the sophisticated yet weak-willed customer to precommit to not delivering past a certain hour, parents can install V-chips and other devices to prevent their children from disapproved behavior, and so forth.

But for most of the policies we have discussed, people are unlikely to be aware of their errors. Consider, for instance, our discussion of cooling-off periods. The essence of the error is that people are oversensitive to the hot state. A firm that competes in the marketplace by voluntarily offering a cooling-off period (at some cost to the firm) will not win the business of the hot customers and will profit less than a firm that offers no such deal. Projection-biased buyers need not only beware tempting sellers, but also their own inability to see temptation for what it is. A similar logic applies to other examples. People are unlikely to be willing to pay for superior defaults because they are not aware of the status quo effect, and if they were aware of it, they would think that they could overcome it. Thus, for example, it is difficult to imagine people paying more for a retirement plan that had a particular default asset allocation if other plans allowed for costless reallocation. People are unlikely to pay for information because, not possessing the information, they are in no position to judge its value. Once they possess it, of course, they have no more reason to pay for it!¹⁴² And, while some people do impose deadlines upon themselves, it is people's naiveté about their own behavior that leads to procrastination in the first place. Relying on people to impose their own deadlines therefore seems unrealistic for many or most people. In each case, it can be seen that individuals are unlikely to value beneficial policies—i.e., be willing to pay for these policies—for the very reason that they are needed.

In promoting asymmetric paternalism, our goal is not to dismiss policies that involve a more heavy-handed paternalism. Indeed, for many problems that merit regulation, asymmetrically paternalistic policies do not exist, and heavy-handed paternalism may be better than no regulation. At the same time, we also emphasize that our goal

¹⁴² Kenneth J. Arrow, *Economic Welfare and the Allocation of Resources for Invention, in THE RATE AND DIRECTION OF INVENTIVE ACTIVITY* 609, 614-16 (Nat'l Bureau of Econ. Research ed., 1964) (commenting on the role of information as a commodity and the issues that arise in its allocation).

is not to promote *more* paternalism. In particular, in some instances, the application of asymmetric paternalism may lead to rules that are *milder* than those currently in place. As an extreme example, our discussion of suicide suggests moving from a heavy-handed policy that prohibits suicide to a milder policy that makes suicide legal subject to certain conditions.

New technologies may introduce new possibilities for asymmetrically paternalistic policies. For example, drunk driving is especially ripe for conservatively paternalistic policies because alcohol increases people's confidence in their own driving skills at the same time as it actually decreases those skills—producing a massive miscalibration in drivers' self-awareness of their own abilities.¹⁴³ New technologies could potentially measure the blood alcohol level of a driver unobtrusively and disable the car if the level is above a designated threshold (perhaps with some type of override that entailed an explicit warning of increased culpability). Such a device would be asymmetrically paternalistic in the sense that it would be completely unobtrusive for those who don't need it—for example, drivers who are not drunk—but would regulate the behavior of those whose driving and decision making is assumed to be undermined. It is possible that such a device would introduce some costs—for example, if a husband with a blood-alcohol level of .06% were unable to drive his wife to the hospital to give birth (though such a device might discourage the husband from drinking to excess in the first place). However, the benefits are likely to overwhelm the costs.

Finally, we return to an issue that we touched on at the outset: in order to properly assess asymmetrically paternalistic policies, we must carefully address whether patterns of apparently irrational behavior are mistakes or expressions of stable preference. To illustrate the importance of this distinction, consider the recent growth of extended warranties that are offered to individuals purchasing consumer durables, from small electronic items to household appliances. Behavioral economics shows that people often overreact to highly salient, rare events, and that people are surprisingly risk averse for small gambles that pose the chance of a loss. Extended warranties capitalize on exactly these patterns of behavior. The fact that they are enormously

¹⁴³ Drunk drivers are involved in nearly 30% of all fatal accidents on the road even though they only account for a much smaller percentage of drivers at any point in time. See Steven D. Levitt & Jack Porter, *How Dangerous Are Drinking Drivers?*, 109 J. POL. ECON. 1198, 1199 (2001) (reporting that during "time periods in which alcohol usage is greatest, [this] proportion rises to almost 60 percent").

profitable to retailers implies they are costly to buyers. Should extended warranties be prohibited? Should we treat those who would be prone to purchase them as though they are modern equivalents of minors or idiots?¹⁴⁴ It depends on whether overpaying for a warranty is a mistake or a preference (a “bug” or a “feature” in the human mind). Perhaps people who buy warranties do not realize how slight the chance is the product will break within the warranty period, or the fact that the small loss they have to pay for repairs out-of-pocket can be easily absorbed into the hedonic ups and downs of everyday life. On the other hand, it is also possible that consumers who purchase warranties are perfectly cognizant of the relevant probabilities and derive real benefits (e.g., “peace of mind”) that warrant the expenditure. In the face of such uncertainty, the right policy is one that encourages disclosure rather than, say, bans warranties. If disclosure reduces warranty purchases by reminding consumers of the low chance of product breakage, then purchasing the warranty would have been a mistake rather than a preference. If informed consumers continue to purchase the warranties, then it is quite possible that they have good reason to do so, however unfathomable that decision may seem to an economist.

To sum up: asymmetric paternalism helps those whose rationality is bounded from making a costly mistake and harms more rational folks very little. Such policies should appeal to everyone across the political spectrum and can potentially shift the debate from one about whether or not paternalism is justified, to one about whether the benefits of mistake prevention are larger than the harms imposed on rational people. The idea is designed to focus debates about paternalism on these empirical terms. Creating a sharp empirical debate may, in turn, encourage social scientists and lawyers to generate new answers.

¹⁴⁴ In a classic episode of *The Simpsons*, Homer was having a crayon hammered into his nose to lower his I.Q. (Don’t ask.) The writers indicated the lowering of his I.Q. by having Homer make ever stupider statements. The surgeon knew the operation was complete when Homer finally exclaimed: “Extended warranty! How can I lose?” *The Simpsons: HOMR* (Fox television broadcast, Dec. 24, 2000).